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# DESTINY OF TO-MORROW



# DESTINY OF TO-MORROW

by

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**Dedicated to my children  
ULI AND GEORGE**  
who have enriched my life, enlightened my path,  
in deep love and as a token of gratitude  
for their courageous attitude  
during the hardest period of my life,  
1938-1941

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## PREFACE

**I** REGARD the Atlantic meeting as one of the most momentous events of this war. The Atlantic Charter which it produced should be considered one of the greatest historic documents; it is the manifestation of true humanitarian ideals. Only in future generations will this be fully realised.

Let us recall the whole situation. The Battle of Britain was won. During this time Britain stood alone with her vanquished allies. Russia had just been invaded. America was not at war. Then came August 12th, 1941, that historic day when the world was informed of the Atlantic meeting between Winston Churchill, the Prime Minister of Great Britain, and the President of the United States. In the midst of this gigantic struggle, with its mobilisation of the most effective and deadly contrivances which have ever proceeded from the ingenuity of man, suddenly there was heard the voice of humanity. The Atlantic Charter in essence endorsed the statement made on the 6th of January, 1941, by President Roosevelt in his speech before Congress: 'In future days we will look forward to the four essential human freedoms. Freedom of speech and expression everywhere; the freedom of every person and the right to worship God in their own way everywhere; freedom from want and freedom from fear.'

On August 24th, 1941, six days after his return to England, Winston Churchill broadcast the description of the Atlantic meeting. Let me quote from this speech words which should be the inspiration of our future life. 'The meeting was therefore symbolic. That is its prime importance. It symbolises in a form and manner which everyone can understand in every land and every clime the deep underlying unities which stir and at decisive moments rule the English-speaking peoples throughout the world. Would it be presumptuous for me to say that it symbolises something even more majestic, namely, the martalling of the good forces of the world against the evil forces which are now so formidable and triumphant and which have cast their cruel spell over the whole of Europe and a large part of Asia? This was a meeting which marks for ever in the pages of history . . .'

I was profoundly impressed to find my own long-held views regarding symbolism given such noble expression by our great statesman. Indeed, mankind needs symbols, needs vision, needs

inspiration. To quote my own words, written years ago, 'Our ideal concepts, our ideas, our imagination nourish us no less for action than do the vitamins and nutriments of our daily food'.

The Atlantic meeting was itself the most perfect symbol of the ideals which animated our great leaders and which must guide the human race after this war is over.

But I was still more stirred when I read the concluding paragraph of this memorable speech. 'The United States and Great Britain do not now assume that there will never be any more war again. On the contrary, we intend to take ample precautions to prevent its renewal in any period we can foresee by effectually disarming the guilty nations while remaining suitably protected ourselves.' I was so inspired to hear the voice of a statesman formulating and applying to world affairs the biologic concept of prevention and prophylaxis, which is of such fundamental importance in modern Medicine, that I was impelled to write this book as the expression of my profound personal gratitude, as well as an embodiment of my own suggestions as to the way in which these noble precepts of the Atlantic Charter could best serve to enlighten the pilgrimage of man in a new era of vision and become the guidance of our 'destiny of to-morrow'.

Let us not falter nor fail. Let us this time steadfastly bear in mind that mankind must be imbued with ideals which are as necessary for our spiritual life as is food for our body. Let us wholeheartedly and honestly strive for a brotherhood of nations, for a world citizenship, for true super-nationalism.

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# I

## INTRODUCTION

'To be, or not to be—that is the question.'

# I

OUR concept of the world must be re-shaped. We are striving for a world-embracing freedom. What we need is vision, conviction and determination. The whole design of post-war planning must be established on a sound biologic and psychologic foundation. Economic considerations must yield to humanitarian principles or we shall again be faced with failure. But the vital question is, 'Where shall we find persons qualified to undertake this tremendous task, persons possessing this vision, conviction and determination so imperatively needed? Where are the men who will clearly visualise the fact that the post-war situation is dependent upon the survival of Europe, and that even the most complete victory will fail if this old Europe is not rehabilitated? Where are the men who thoroughly realise that there are morbid conditions existing in man, as in animals, and even in stones, and that as we can distinguish the healthy from the diseased in organic life, so also must we learn to distinguish the same difference in states and societies. A healthy world demands a social and political system built upon natural laws.

Statesmen must be able to lay the foundations for a lasting peace on material supplied by the experts in the fields of Psychology, Biology and Economics, after a suitable weeding out has taken place.

We must endeavour with all our might to build up a life based upon and governed by humanitarianism. For this reason it is imperative that we win the peace.

The war will certainly be won because all efforts are being applied in a magnificent way to the accomplishment of this gigantic task. All sources of power, both mental and material, are being mobilised to this end. But it is obvious that after the war we shall be confronted by vast accumulations of exhaustion. It is highly essential therefore that we clearly visualise this impending situation, because exhaustion will lead to relaxation,—a condition

which must above all be avoided. For if relaxation is not prevented the peace will be lost.

Wars are never fought nor won through relaxation, but only through an output of maximum effort. The same applies to peace. Peace cannot be established but must be won. And this aim can be attained only by means of the same dynamic drive which was needed to win the war. This time we must fight to win the peace at least as hard as we have had to fight to win the war. The effort required is the same in both cases, the only difference lying in the fact that the propelling impetus behind the two efforts is destructive in the one case and constructive in the other. The thoughts which will help us to win the peace must therefore take into account all the experiences which we have acquired as a result both of our mistakes and of our newly gained knowledge.

In order to win this peace we need an ideology which must become the ideology of the world of to-morrow. Mankind will have to realise that tradition and religion represent the most profound dynamic principles of life.

The glory of mankind is bound up with our reverence for the eternal values upon which humanity is based and in which the human and humanitarian concepts of life are anchored. Humanitarianism is rooted in Christianity. The Christian ideal must finally be accepted as the basis, the essence and the aim of our spiritual existence, and Christianity must be interpreted, not only as a religious form or cult, but as an ideology. In the words of Bernard Shaw: 'Christianity has not failed, it has never been tried.' Or to quote Søren Kierkegaard: 'Christendom has done away with Christianity without being aware of it. The consequence is that, if anything is to be done, one must try again to introduce Christianity into Christendom.' Let us therefore wholeheartedly give it a trial.

If Christianity becomes the soul of our ethical and spiritual life and the basis of the world of to-morrow, the ideals of the Atlantic Charter will be realised, with the result that many of our most difficult problems will be solved automatically. Neither racial hatred nor persecution nor any form of inhumanity will any longer be possible, for Christianity implies a respect for human dignity.

Although I realise that we are faced by a practically insoluble problem, I nevertheless hold that nothing should be regarded as impossible. And in this opinion I am strengthened by the accomplishments of this war. The invasion of the Continent was considered a practical impossibility, particularly in view of the

situation which followed upon the evacuation of Dunkirk. Nevertheless, when it has been possible for us to fight the Battle of Britain and to launch this gigantic invasion scheme,—the supreme achievement of history,—I must ask, why should it not be possible to solve all those apparently impossible problems which yet confront us? Let us therefore look them squarely in the face and resolve not only to thrash them out, but to take no rest until we have found our solutions. For if we have been able to solve all the various problems connected with the work of destruction and annihilation, why should we not for the first time in history apply all our efforts towards solving the complex and difficult problems of a constructive nature which aim at happiness, justice and freedom?

Recent advances in Biology and Psychology have opened up many new opportunities, not only for the development of Medicine, but for all the pending problems of culture and civilisation. The most urgent task now before us is properly to utilise all our acquired knowledge and practical experience in order that we may be able to deal with every event connected with human affairs. One is compelled to ask why all this valuable knowledge has been entirely ignored when it might have been turned to such profitable account for the benefit of human society by those entrusted with watching over and shaping events.

The aim of modern medicine is prophylaxis and this should equally be the aim of modern statesmanship. If we wish to keep up-to-date in world affairs we must learn to abandon our former patchwork policy and apply similar scientific methods to all our plans of post-war adjustment. To continue the analogy: only he is a really good doctor who focusses his attention mainly upon prevention and is able to benefit by his mistakes; to analyse these mistakes and to be willing, if necessary, to correct his own opinion and to adopt totally novel theories. Let us therefore hope that the statesmen of the assembled nations who are now meeting to consider the world policies to be framed and adopted will show an equal breadth of vision.

In view of the existing state of affairs I have thought that it might be profitable and helpful to review briefly the most significant facts and advances in biology, psychology and modern medicine and to present them prominently to those responsible for the re-shaping of the world of to-morrow.

All the many books dealing with post-war planning, all the numerous discussions on the same subject, all lack the appro-

priate biological outlook. In all of them the interest centres mainly around economic and political problems. But we must realise that the world of to-morrow will be a totally new world, as a result of all the many remarkable advances in technology and science. With this in mind it is positively astounding to note to what a degree the medical and biological point of view can be and has been disregarded in matters concerning the fate of mankind. This fact in itself strikingly indicates that all the various politicians and economists still believe themselves capable of handling human affairs while lacking any adequate information regarding human nature itself. But human nature is governed by strict biologic laws which apply equally to the individual and to society as a whole. Hence it is imperative that all persons responsible for the welfare and prosperity of the race thoroughly familiarise themselves with these laws. Foreign policy and all endeavours to reconstruct a new world on a better and sounder basis must therefore be centred on the laws governing the biologic destiny of mankind.

But may I ask, who can have a better understanding and a profounder knowledge of all these matters than the physician who daily faces life in all its manifold aspects? Have the various politicians really been shown to possess such a sound understanding and knowledge of human nature that we should again entrust our fate, and what is of more consequence, the fate of future generations, to their keeping? Where are their credentials which would justify our again conferring upon them such plenipotentiary powers?

Already in 1935 in my book *The Hyper-sensitive Man* I endeavoured to show how far our medical knowledge could be applied to a better understanding of world occurrences and historic events.

The various experiences of my life which have illuminated and enriched my own pathway have brought me into contact with so many persons and circumstances that have contributed directly to my personal development that a description of some of these miscellaneous experiences and impressions might, if viewed from various angles,—social, scientific and cultural,—perhaps serve to clarify some of the nebulous ideas and situations of the present time.

Thus I am very strongly urged to contribute my own suggestions towards an interpretation and solution of the innumerable problems of reconstruction. And perhaps I may even claim a special right to do so, since I have personally experienced what it means, after a lifetime dedicated to science, culture and sedulous

medical efforts, to have been suddenly confronted and outlawed by Nazism and to have been forced in the dead of night to leave my homeland and everything that I possessed and cherished. I am convinced that no one who has not undergone such a personal experience can be competent or can even possess the right to deal with all these intricate problems of adjustment; above all, that nobody who has not experienced what it means to be forced to emigrate and to seek refuge abroad can adequately deal with the question of re-emigration and all the manifold aspects of the refugee problem.

## II

Civilisation has suffered, not only its greatest, but its most fatal blow. All that we recognised and cherished as cultural achievement has been ruthlessly annihilated. Since humanity is indissolubly bound up with culture this means that humanity has been shattered to its very foundations. Mankind itself is at stake.

To-day there can no longer exist any doubt as to whether a distinction can or should be made between civilisation and culture. It is only too obvious that, whereas civilisation has progressed and developed, culture has disintegrated. We know that the western world has always shown a tendency to identify the two terms; nevertheless, biologically considered, there exists a profound difference between civilisation and culture. Civilisation and culture are manifestations of life corresponding to the ambivalence within all living forms. It has been my aim to show the biological conditions underlying each of these two concepts.

Let us penetrate a little deeper into this question. Civilisation has certainly attained many magnificent results in the various technical and scientific fields. Stupendous accomplishments have been achieved, mainly as the result of the efforts of the past thirty years. The air has been conquered; by means of flying we can now reach the farthest continents within the space of a few hours; the film has enabled us to see the entire earth in all its variety. But let me ask: Have all these achievements been used exclusively for the benefit of mankind, or have they not largely been applied to its ruin and downfall? Has the growth of our spiritual and mental life kept pace with all the technical and scientific achievements? Has not rather our whole spiritual existence become mechanised? The answer is only too obvious. We have been guided and inspired by an industrialised outlook. Machinery has dominated us. If we survey the intervening period between the two great wars



we see that all the values which we once cherished as culture have been ruthlessly sacrificed during the past two decades. Instead of employing the facilities we possess to enjoy the beauty and the greatness of the universe, we have utilised most of them for the purpose of killing human life and destroying the beauties around us,—for the shattering of the glory of mankind. If we fully recognise these facts we shall realise that civilisation should never be identified with culture. However much civilisation may have been advanced, certain it is that culture has been destroyed. It has returned to the barbaric phase of the Dark Ages. Culture is rooted in the soul, the heart, in the depths and feelings of humanity. But now the soul no longer counts for anything and the emotions are despised. Moreover, the generation of to-day is proud of its immunity to emotion. But the world of to-morrow will again need tears. Mankind needs depths of feeling. We must not be ashamed of our emotions; we must show them. The world of to-morrow must abandon all its masks. A romantic outlook must be revived. Civilisation must be made the instrument of culture.

It is imperative that the improvements in Science, the accomplishments of Medicine be finally and unswervingly applied to the benefit of mankind, to the happiness of the human race. Never again must they be used to augment its sorrows, its sufferings and its fears. Let us admit that our civilisation has led to the bankruptcy of the whole world. Let us furthermore admit that we physicians share the responsibility for this bankruptcy. For we have watched with open eyes and without protest the steady accumulation of inventions of death-dealing destruction. We have even been complacent witnesses of the award of the famous Nobel Prize to the 'great' man who elaborated the deadly poison gas and similar destructive agents.

But if all this energy has been invested in inventions which have aimed merely at destruction, it is obvious that it must have been the desire of the inventors that the fruit of their labour should not be in vain. In other words, it would have been a matter of great regret to them if no war had followed to crown their efforts. In this fact we witness the prostitution of Science.

Now I maintain that since we physicians are the guardians of the welfare of the human race, with the duty of watching over its hygienic condition, not only are we under the obligation of emphatically insisting that any future misapplication of science and technology aiming at destruction shall be met by our whole-hearted and united protests, but we also wish to make it quite clear to the world that should our protests prove unavailing we

physicians will be compelled to cease giving our services to the world.

It is certainly outside the domain of Medicine to deal with the manifold tasks arising from the consequences of bombs, blast and poison gas. We doctors are sufficiently occupied with natural physical complaints without having to combat these arbitrarily-provoked destructive conditions which all men condemn. Therefore I suggest the creation of an international league of physicians whose duty it shall be to watch over and maintain, not only the physical, but also the mental hygiene of the world. Either humanity is and will remain the centre of interest of the medical profession or it will not. There is no compromise possible. If the physicians of the world are to bear the full responsibility for the hygiene of the people it is only fit and proper that these men should have a voice in human affairs, and a powerful voice too, and furthermore that they should never hesitate to raise their voices whenever the mental or moral health of nations is endangered. Consequently I must insist that after this war physicians should be accorded their rightful place in every council which discusses the coming peace.

Indeed, the fraternity of biologists and medical men will have to ask themselves the question whether matters need have gone so far and whether determined action on their part, as members of an international body, might not have acted as a check at least on the ruthlessness of a handful of men, degenerate in body and mind. And at this point I wish to emphasise an important fact which has hitherto never been realised. No government, whether of peace or war, is able to carry on its work without the assistance of doctors. Medicine is indispensable. If all the physicians of the world were to associate themselves in an international league, in order to withhold their collaboration and assistance in the destruction of life, and were to co-operate only in works of peace, another war would become impossible. No government could continue to act without medical co-operation. The help of doctors is essential. If physicians were to refuse their help to any government established on a basis incompatible with humanitarian principles the rulers would be compelled to meet the ethical and logical demands of the medical profession.

This war was entirely avoidable. This war can only be interpreted and understood as a final result, as a last evidence of the decline of all those values which might have enriched us with their greatest triumphs.

History will decide to how great an extent the combined policy





of the statesmen failed and to what degree their lack of knowledge, imagination and vision furthered the extension of Hitlerism and thereby helped to bring on this war. The world said nothing and even the entire medical profession remained a silent witness while the fate of mankind was at stake.

Since we are now confronted with the results of this catastrophe it is imperative that we make a final choice, a choice as to whether we will be dedicated to and guided by compromises, agreements and empty words, or whether we wish to be imbued with the firm resolution that all our resources and achievements shall be applied exclusively to the benefit of mankind, to the creation of a world possessing soul, heart and breath; to a world re-dedicated to all the spiritual values of life; to a world based on the Four Freedoms. Every kind of compromise bears within itself the germs of destruction which sooner or later will involve the whole race in a renewed struggle. Our concern must be to win a real peace, based on a sound foundation, so that future generations will never again have to face the evils of war. But one thing is essential in order to achieve this end: a profound respect for the individual, for his personal rights and liberties, associated with a new sense of super-nationalism. The more the individual is respected, the greater will be our consideration of society as a whole. The greater our respect for the individual, the deeper will be our sense of super-nationalism.

We must attain our goal of becoming a commonwealth of brothers, but we must at the same time refrain from committing the error of identifying such a commonwealth with a condition in which everyone will be the same. To quote the words of Winston Churchill: 'Human beings are endowed with infinitely varied qualities and dispositions and each one is different from the others. We cannot make them all the same; it would be a pretty dull world if we did.' No words could better express my own feelings.

Let me also call attention in this connection to a quotation from Jacques Maritain: 'If democracies are still able to escape from danger, it is by turning themselves decisively in the direction of the democracy of the person. And this presupposes an internal transformation, a complete turn about of spirit.'

For all intelligent persons therefore the present war can only be understood as the last link in the chain of all those events which reached their climax in 1938 and which have become a turning point in the history of the world,—events of which, alas, we have been the helpless victims. All that we have experienced can and must never be forgotten, because if this catastrophe has not taught

us our final lesson it will never be learnt and mankind will deserve no better fate than complete annihilation.

This war is the result of the entire and complete failure and incompetence of the statesmen of the world. If we wish to discuss the problem of reconstruction in general and of European reconstruction in particular we must realise that the present cataclysm was not only due to Hitler. The whole soil of Europe was propitious for the germination of the deadly bacillus of Nazism. Hence, radical purification of the soil must be effected, for it is a great mistake to assume that after the war is over the mentality of the people will automatically change. It will be a long time before the toxic Nazi bacillus is destroyed, and it is just this interval which must be utilised for reconstruction. During this period of reconstruction we must prepare the soil upon which a durable peace can be sown. During this time we must make every effort, by means of propaganda, education and other methods, to destroy for all time the fatal Germanic ideology which was the source of Hitler's power and which reinforced Hitler's doctrines.

We have to recall that when Hitler came to power his book *Mein Kampf* had long been published and could be read in every corner of the world. And as soon as he attained supremacy he demonstrated very forcibly that he intended to adhere strictly to all the pronouncements contained in this book. And what did the world do to offset this attitude? What did all the nations and the various governments do in protest against the concentration camps, against the persecution of political opponents, of the Jews, of the priests? What did the world do when Hitler with his own hands murdered his personal friends in the blood bath of June, 1934? What did world diplomacy, including the League of Nations, do when Hitler assassinated the Austrian Chancellor Dollfuss who only a short time before, when he addressed the League of Nations at Geneva, had been fêted as an outstanding statesman? Whilst in the heart of Europe and in the midst of peace human beings were being slaughtered by the thousands, robbed of their personal liberty and possessions, forced to leave their homeland and to seek refuge abroad, what did the diplomatists do in the face of this state of affairs? They remained at their posts as the representatives of their respective governments, and insisted that it was not their task to interfere in the internal affairs of other countries. As long as such horrors can be perpetrated with impunity in the heart of Europe and the League of Nations, together with the various unaffected countries, can remain unwilling or powerless to check them by taking a decisive step, we must ask

ourselves, What is the purpose of the League of Nations?. What is the object of maintaining embassies in the various countries?

Hitler's deeds were known to all, they made a murderer of him. The invasion of Austria was based on lies, for not a single statement made by Hitler or his fellow-criminals was true. Let me therefore ask this important question: How is it possible that after all that had taken place a Gentlemen's Agreement could be concluded with such a man? If I sign a Gentlemen's Agreement I infer that my partner is a gentleman.

Therefore I must accuse the whole world of being equally responsible for this catastrophe, for this war. A person who looks on with calm indifference while his neighbour is being assassinated and does nothing, merely because it is not his concern—such a person surely does not deserve a better fate himself. A civilised world does not uphold the dictum 'Am I my brother's keeper?'.

We must recall the whole situation as it existed prior to the outbreak of the war. With reference particularly to the tragic fate of all the Jews who were forced to seek refuge abroad, let us visualise how these refugees have been treated, not only before they left their homes but also after they had fled to foreign countries where they were considered as second-rate. For any intelligent person it was understandable that sooner or later such a system of persecution with all its sad consequences was bound to end in catastrophe. And realising the whole situation as it existed I must say that a great fund of faith is needed in order not to despair of humanity. Certain it is that as long as these problems are not properly solved all attempts at reconstruction are bound to end in failure. Never again must our post-war planning be based on lies. Never again therefore must the final decisions be left to politicians exclusively.

I have attempted in this book to discuss the recent achievements in Biology, Psychology and Medicine, which can be regarded as milestones in the history of modern Medicine. I have endeavoured moreover to show the mechanism upon which the adaptation of the individual to his environment is based, and I have tried to offer a biological explanation of what we understand by the words 'Culture' and 'Civilisation'. Without a sound knowledge of the manner of adaptation of the individual to his environment and of all the various factors upon which culture and civilisation depend, we cannot acquire a proper understanding of all the many forces which are responsible for mass reactions and which become determinants of human destiny.

It is a familiar saying that history repeats itself and that man-

kind never learns from the experiences of history. Let us abandon this assumption. Let us for the first time learn from history and from all its experiences. In view of the shortness of human memory and of its fatal tendency to forget unpleasant experiences, let us this time determine to mobilise all those forces which assist in memory retention, as an offset and protection against that vital and powerful self-defensive mechanism, represented by forgetfulness.

Even to-day there is already great talk about the next war. Let us suppress, not only this talk, but the very idea of such a possibility. The only power which can avoid another war lies in the hands of the physicians. It is they who hold the trump card in their hands and can play it if . . . Upon this 'if' depend all further developments. *If* the doctors firmly unite as an international body to fight for all those ideas which I have stressed; *if* the doctors in their deepest hearts are convinced that it is their mission to fight against all that is destructive of human life; *if* a supreme council of doctors is finally established to watch over human health and welfare, the doctors through such a council will inevitably become a supreme instrument of control in world politics and diplomacy.

The pathway in our human pilgrimage has led to so many cross-roads and bifurcations that if we are not to be lost in a hopeless and bewildering maze it behoves us to pause in our wanderings and endeavour to take our bearings among all this confusion of mistaken progress. We must learn from our errors, we must learn from our faults, if we do not wish to be guilty again of bringing on a new catastrophe for our children and our children's children. We have now reached a definite and critical stage in the history of mankind and we must make our final choice,—the choice between freedom or slavery, religion or paganism, culture or a mechanised civilisation, humanitarianism or barbarism, God or Satan.

## II

### SIGMUND FREUD AND ALFRED ADLER

**T**HE question can be raised whether and to what extent a thorough knowledge of modern psychology will be valuable for all involved in the tremendous task of settling the affairs connected with the destiny of to-morrow. As I have already stressed in my Introduction, it is impossible adequately to deal



with human problems without an understanding of biology and psychology; hence everybody entrusted with any responsibility in the work of reconstruction must have a knowledge of the fundamental principles of modern psychology and of the work of Freud. Sigmund Freud has fundamentally changed our entire outlook through his complete revolutionisation of the whole domain of psychology. If, therefore, we wish to avoid further mistakes in our handling of world problems, it seems essential to be acquainted with the basic principles of both Freud's and Adler's theories of psychology. Furthermore, no statesman lacking this knowledge should be permitted to take part in any discussions regarding human affairs. Our psychology of to-day must become our guide of to-morrow. It must be applied in all the momentous decisions concerning the reconstruction and social structure of nations, for modern sociology should be no less than applied biology and psychology.

Let me quote the following words of Freud, words which might well serve as our guide in all post-war planning:

'It is quite impossible to understand how psychological factors can be overlooked where the reactions of living human beings are involved.

'Men can do no more than set their original instinctual impulses in motion—their self-preservative instinct, their love of aggression, their need for love and their impulse to attain pleasure and avoid pain.

'We have emphasised the importance of the part played by the super-ego, which represents tradition and the ideals of the past.

'We must not forget that the mass of mankind, subjected though they are to economic necessities, are borne on by a process of cultural development—some call it civilisation—which is no doubt influenced by all the other factors, but is equally certainly independent of them in origin; it is comparable to an organic process and is quite capable of itself having an effect upon the other factors.

'For sociology, which deals with the behaviour of man in society, can be nothing other than applied psychology. Strictly speaking indeed, there are only two sciences—psychology, pure and applied, and natural science.'

This quotation shows to how great an extent Freud's psychology can be rendered practicable. But we must ask, What are we to understand by the term 'super-ego'? Is the ego within ourselves not an entity? Do the instincts really play such a decisive part in our life and in our whole attitude toward life, or are they not rather controlled by our will-power?

In any consideration of the instinctive life it will be necessary to discuss the rôle played by the subconscious in the building up and

breaking down of the whole personality. And for this a knowledge of Freud's system of Psychoanalysis is indispensable.

It should not be imagined that the discovery of psychoanalysis was a mere coincidence. This was far from being the case. The whole spiritual atmosphere of the epoch which produced it was charged with a new impulse. In the same year in which Freud's first book was published the great French philosopher Bergson published his fundamental work on *Matière et Mémoire*. It is, moreover, fascinating to realise that in the very year that Freud laid his foundation for psychoanalysis and started to probe into the subconscious and thence into the depths of man's mind and soul, Roentgen discovered the X-rays which permitted visual penetration into every part of the human body. Nor is it less significant to record that this was also the year in which Marconi discovered wireless telegraphy.

It was in the winter of 1908 that I had the good fortune to attend Sigmund Freud's lectures. Every Saturday at six o'clock a large audience, composed of members and students from all the various faculties, was gathered in the lecture room of the old Psychiatric Clinic of Vienna, the same room in which Wagner von Jauregg, the famous psychiatrist, delivered his clinical lectures. Freud always entered like a patriarch, wearing a top-hat and never without his stick. The audience greeted him by rising. Immediately afterwards, when Freud sat down in front of the table, there was an unexpected silence. Then with his unforgettable voice and his wonderful eyes, so clear, so full of kindness and yet so penetrating that they seemed to pierce into one's inmost being, and with that strange smile of deep understanding, he started to deliver his lecture. He always spoke extempore, with a certain shyness, and invariably opened with the words: 'Ladies and Gentlemen.'

I distinctly recall his preliminary remarks at that first lecture. Freud began: 'I don't know whether I am right or wrong in speaking to you, because the subject I am dealing with will, I am afraid, take away some of the illusions which you still retain about our human nature. But unfortunately my research into psychoanalysis has opened up many new points of view and, whether I wish it or not, I am compelled to admit that we have no cause to be very proud of ourselves, or rather of what we have been taught to believe regarding our will power. I must show you that our being is governed by our subconsciousness and you will, I am sure, very soon appreciate to what an extent the subconscious influences all our actions, our dreams and our everyday life.'

And now he started to lead us through the whole maze of the subconscious life. He spoke about the development of all the questions with which psychoanalysis is concerned. It can be imagined with what tension and expectation we awaited the next lecture. Anyone who has ever listened to this wonderful man as he explained the way in which psychoanalysis has developed will, I am sure, never forget those precious hours. His ideas, his lectures on the theory and interpretation of dreams remain an unforgettable memory.

Whoever was privileged to have the principles of psychoanalytic research conveyed, not only through the many papers written on this subject, but through direct contact with the originator himself, can understand why it should have taken such deep root in one's very being and consciousness. Psychoanalysis at that time was young, in its very beginnings. But we also were young and, filled with the zest and enthusiasm of youth, we drank in uncritically from this new ocean of thought. In the words of Arthur Schnitzler: 'As long as one is young all doors are open and before every door the world begins.' There is a particular thrill about studying Medicine, and it is indeed true that every day a new door opens and every day one enters into a new world. Such an influence as that of Freud was bound to impress us. From the outset of my own medical studies my whole outlook became biased, even though I never became a direct convert to psychoanalysis in the literal sense of being an uncritical follower. Certain it is that Freud's whole personality and entire trend of thought impressed me very deeply and greatly broadened my horizon; nevertheless, despite the attraction I felt for the symbolism and many of its explanations, I very soon sensed a certain limitation in this theory, for I was searching for a deeper biological foundation of the whole conception of the subconscious.

However, I continued to follow closely all the developments of psychoanalysis. Indeed it was but natural that those of my generation who from having grown up in this atmosphere were not only familiar, but intimately associated with the various theories about the manifestations of the subconscious, should have found our whole trend of thought involuntarily influenced by them, so that we automatically acquired a better understanding of all psychological problems.

It is not my intention to give a survey of psychoanalysis or to discuss all the problems involved. My aim is to show how far our modes of thought should be influenced by psychoanalytic research. Moreover, I venture to emphasise again how important it

is to know modern psychology in order to deal with human affairs in accordance with the latest established scientific facts.

Freud endeavoured to show the psychopathology of everyday life by explaining the reasons why we forget names or words or the order of words, why we make mistakes in speech, in reading or writing. He showed that all these errors are caused by our subconscious and are the result of a certain mechanism which he termed *Verdrängung* (suppression) and which can very often be traced back to our very earliest memories of childhood. He elucidated the symbolism underlying the various types of error, discussing these problems in all their complexity in his *Psychopathology of Everyday Life*. But his standard work was undoubtedly *Die Traumdeutung* (*On the Interpretation of Dreams*). In this book he demonstrated that dreams possess a language of their own, that of symbols, which are to be interpreted as the expression of our unfulfilled desires and unrealised efforts. Symbolism is the key to Psychoanalysis.

One of the most fascinating lectures that will always remain in my mind is the one in which Freud mentioned his first observations that laid the basis of his psychoanalysis. In his first book, *Studies of Hysteria*, written in collaboration with Dr. Josef Breuer, one of the most famous of the old Viennese practitioners, the basic principles of psychoanalysis were already indicated. The keenness of the whole conception was striking. Freud's power of observing even the smallest symptom is both illuminating and fascinating. This book will remain a classic monument of medicine. I think the history of the first case, treated by Breuer, who communicated his observations to Freud, should be recounted. It should be mentioned, by the way, that during his period of study in Paris Freud had been profoundly influenced by the lectures of Charcot, the greatest psychiatrist of the day. Charcot's methods of treating hysteria by means of hypnotism, which were new, rendered hysterical phenomena comprehensible by being interpreted as due to a dissociation of consciousness. After Freud's return to Vienna he communicated all his Parisian medical experiences to his old and close friend Breuer, who thereupon told Freud about a case of hysteria which he himself was handling by means of a new method, which he proceeded to explain. Freud was so greatly impressed by this method that he himself started to work on it, with the result that, in collaboration with Breuer, he established the basic principles of a new treatment which he called Psychoanalysis. The case in question was that of a young girl suffering from various symptoms classified as hysteria: paralytic symptoms, dis-

ordered speech and somnambulistic tendencies. Breuer was applying a new method of treatment which relieved her of all these troubles. He hypnotised the patient, and during the hypnotic sleep she was able to remember a great deal of what she had completely forgotten while awake and had therefore never mentioned. But when, under the hypnotic influence, she suddenly recalled the first time that the symptoms had occurred, and was able to trace back the thread of her memory to their origin, the symptoms vanished.

It was significant that when the patient was able to recall the first instance in which the pathological condition had showed itself the symptoms vanished for good. It is easy to understand that this cure should have made so profound an impression on Freud, since Breuer had demonstrated by this case that hysterical symptoms vanish when the pathogenetic idea can be disinterred from the subconscious. As a matter of fact, it was in this book, *Studies of Hysteria*, that the basis of Psychoanalysis was laid and the main principles of the functional mechanism of the subconscious were established.

But we must centre our interest on the theory of the instincts. I am of the opinion that it will be necessary for us to have a sound knowledge of our instinctive life and of our ego if we wish to acquire a proper understanding of human events and of the behaviour of man in society.

Let me quote Freud's own words:

'The theory of the instincts is, as it were, our mythology. The instincts are mythical beings, superb in their indefiniteness. It is a biological fact that the living individual serves two purposes, self-preservation and the preservation of the species, which seem to be independent of each other, which we have not been able to trace back to a common source, and whose interests often conflict in animal life. Here we are really discussing biological psychology, we are studying the psychological concomitance of biological processes. . . . In accordance with this view, we introduced the "ego-instincts" and the "sexual instincts" into psychoanalysis. Under the former heading we placed everything that had to do with the preservation, maintenance and advancement of the individual. Our investigation of the neuroses led us to regard the ego as the restricting and repressing force and the sexual impulses as the restricted and repressed ones, with the result that we thought we had firmly grasped, not only the difference between the two groups in instincts, but the conflict between them.

'An instinct differs from a stimulus in that it arises from sources of stimulation within the body, operates as a constant force, and is such that the subject cannot escape from it by flight as he can from an ex-

ternal stimulus. An instinct may be described as having a source, an object and an aim. The source is a state of excitation within the body, and its aim is to remove that excitation; in the course of its path from its source to the attainment of its aim the instinct becomes operative mentally. We picture it as a certain sum of energy forcing its way in a certain direction. We speak of active and passive instincts, but we ought rather to speak of active and passive instinctual aims.'

But we have only been able to understand our instinctive life since we have realised the importance of the subconscious. And it is just this knowledge of the subconscious, which Freud elaborated in every detail, that must be regarded as his chief contribution to mankind. What are we to understand by the 'subconscious'? The answer is that any mental process the existence of which we are compelled to assume but which we are not really able to envisage belongs to the subconscious. As a matter of fact, we are unaware of our subconscious life, because our relation to that mental department is the same as it is to the mental condition of another person, with the only difference that this subconscious is a part of ourselves. We must bear in mind the fact that the subconscious has been active in us from the very beginning of our life and even before our own life,—an assumption which must be regarded as definitely established. The subconscious is certainly not homogeneous, for the entire domain of the subconscious constitutes a complete system. One part of this system was at one time within our consciousness and became gradually removed from it through rejection or repression. But it remains within the subconscious, beneath the surface, where it continues to operate. The other part of the subconscious—the pre-conscious, has never reached the conscious, because from the very outset it has been rejected. Some factor has forbidden it from entering into the realm of the conscious. And finally there is within us a subconscious content which is inherited and can be called the 'ancestral consciousness'. While it is easy to understand that the various inherited experiences did not all reach the conscious, but remained stored within the subconscious, due to cell memory, we shall have to ask which is the power that is responsible for repressing and rejecting the entrance into our consciousness of certain parts of the subconscious. Why have they never been permitted to enter into the domain of the conscious? The answer is not known, but the latest psychoanalytic research has shown that the super-ego wishes to control and dominate our instinctive life. All the various instincts are more or less prohibited from entering into the conscious. This part of the subconscious is the 'id'.

During our lifetime there exists a conflict between the whole subconscious system and the ego. The ego is the product both of the joint operation of and the conflict between the super-ego and the 'id'.

This conflict it is which stamps our personality. Our individuality, our whole attitude toward life is nothing but the manifestation of this conflict.

Psychoanalysis has therefore familiarised us with the principle that large and important regions of the mind are normally beyond the knowledge of the ego, so that the processes which occur there must be recognised as being subconscious in the true dynamic sense of the term. The word 'subconscious', according to Freud, has more and more been applied to a mental province, rather than to a quality pertaining to mental processes. We can say that the personality is the product of our ego, which is determined by the super-ego and the 'id'.

To-day we have a better understanding of the 'id', because it really represents a biological province. This understanding has been acquired as a result of our increased knowledge of the manner in which the hormones control our mental state. Recent studies have elucidated the idea that the 'id' should be identified with what I have elsewhere<sup>1</sup> designated as the 'instinctive self'. The instinctive self governs and is governed by all the vegetative processes within our tissues. This realm of our being, the 'id', is uncontrollable, and must be considered responsible for all the various reactions within us which to-day we summarise under the term 'ergic'. This ergic principle can become *anergic*, that is to say, hypo-sensitive, or it can be rendered *allergic*, that is to say, hyper-sensitive. In my opinion the ego should be considered as both the function and the integration of three factors, which in their *ensemble* constitute the entire personality: the super-ego, the 'id' and the environment. Whilst the super-ego and the 'id' determine the internal *milieu* within the individual, the environment must be regarded as the external *milieu*. The ego is the product of the conflict between the 'id' and the super-ego, on the one hand, and between the 'id' and super-ego conjointly and the environment, on the other hand. Therefore we can conceive of the ego as the intermediary or buffer between the internal and the external *milieus*. The latter represents the dangers of reality. Thus the individual is confronted by the demands of reality and is directed by the commands of the instincts.

<sup>1</sup> *Allergic Man*.

The ego is in the nature of a compromise, a compromise due to the demands made by reality on our conscious. As we have seen, the ego is not independent in all its actions, and can be regarded as rather weak. It is in continual conflict, but without realising the fact, because the ego borrows its energy from the 'id' and has therefore to carry out the intentions, both of the 'id' and of the super-ego. A personality can be regarded as harmonised if its ego is adjusted to the demands both from within and from without. This means that there is a complete balance between the external and the internal *milieus*.

The 'id' is the domain of all our untamed passions. But through the operation of our conscious everything that arises from the subconscious system tends to be suppressed and resisted. The conscious governed by the super-ego demands inhibitions. The more man becomes civilised the more is he dominated by inhibitions. We are always confronted by the conflict between prohibitions set by the demands of our environment and those proceeding from the reactions of our ego to the subconscious. The super-ego must be regarded as the chief agent of control in adjusting us to the needs of our environment and thereby to social life. This it does by repressing all the instinctive aims which proceed from the subconscious.

We must distinguish between two fundamentally different forms of instinct. The first is the sexual instinct, conceived in a broad sense as identified with the *eros* in ourselves, or, to use the term introduced by Freud, the *libido*. The second dominant instinct is that of aggression, which aims at destruction. This destructive instinct is to be understood as a part of the mechanism associated with the aggressiveness in our nature which is connected with self-preservation. This aggressive instinct will, of course, be repressed. It will remain hidden, but it will assume many disguised forms which are revealed in various attitudes. Why is this instinct repressed? As a result of the development of the super-ego. And if we ask why it has taken so long for us to recognise the existence of this aggressive instinct, the answer is plain and transparent to anyone familiar with human nature. There still prevails much hesitation in accepting the existence of such an instinct, which we readily attribute to animals, but are loath to recognise in man as the representative of *homo sapiens*. Despite the evidence of psychoanalytic research, which has demonstrated the existence of this aggressive instinct within our being, its recognition and acceptance still meet with considerable opposition. Nevertheless, it is essential that we realise these significant facts which must be



boldly confronted if we wish successfully to cope with all the problems connected with the re-shaping of man's heritage.

Admitting then the demonstrated existence of all these various instincts, what are their modes of operation?

They are concealed within our subconscious and only manifest themselves in the various disguised forms which are expressed in symbols. But biologically considered, it is essential that we admit that man so governed by his instincts can no longer be regarded as by nature either good or bad. If at times he shows himself to be brutal, violent and cruel, these manifestations are only passing disturbances of his emotional life, and perhaps merely the consequence of the ill-adjusted social system which he has made for himself. The assumption that man is by nature inherently good, is one of those unfortunate delusions which impel him to expect some kind of idealisation or amelioration of his lot, but which in reality lead only to disaster. The special instinct of aggression and destructiveness in man has a biological foundation and must be traced back to *sadism* and *masochism*, as the two poles of our sex instincts. All our instincts operate in accordance with the law of our bipolarity, and sadism and masochism represent basic elements within our being. It is our task through the mechanism of sublimation to convert these primitive instincts into higher positive ones, in order that they may become a part of our mental state.

Our erotic life is also based on these two fundamental instincts, masochism and sadism. Consequently every kind of erotic urge is accompanied by aggressiveness which therefore is one of the instincts which we must accept as of vital importance. Aggressiveness is linked with destructiveness and these two instinctive tendencies are localised in the 'id'. Naturally they are found associated in the greatest variety of proportions, but we must nevertheless recognise the existence of these two fundamental instincts and ascribe to each its own aim. The manner in which the two mingle in the vital process; how, for instance, the *death instinct* is pressed into the service of Eros, especially when it is turned outwards in the form of aggressiveness,—all these are problems which have been partly solved by psychoanalytic research, but which undoubtedly offer scope for further investigation. Certain it is, however, that these problems are of the greatest concern, and must be faced and frankly envisaged if we wish to discuss world affairs and the fate of mankind. Without such a knowledge nothing can be achieved except mistakes and failure.

Everything productive within us, all that characterises our

spiritual life, is to be understood as the sublimation of those fundamental instincts of our 'id'.

It is a most interesting fact that in all cultural achievements these primitive instincts can always be found in a transformed or sublimated form. The clarification of this point is perhaps one of the most gratifying contributions of Psychoanalysis. It leads to a deeper understanding of the dynamic tendencies within our soul and mind. This type of psychology is certainly in no way connected with so-called Philosophy with its over-estimation of the epistemology of our logical operations and its entire disregard of intuition, which must be understood as the manifestation of the subconscious, of the instinctive self.

Out of the soil of Freud's psychoanalysis there has sprung up another branch of psychological thought which has also fundamentally influenced modern psychology. I refer to the results of Alfred Adler's investigations into the mechanism of the inferiority complex, a subject which has exercised a dominant rôle in the whole realm of dynamic psychology. I would even go so far as to say that modern psychology is as greatly indebted to Adler as it is to Freud.

When in 1907 Adler published his *Study on the inferiority of Organs* he left the Psychoanalytic Society and established his own Society of Individual Psychology. It is very regrettable that this should have caused a break between him and Freud, who refused to include these new ideas in his own concept of psychology. Although Adler's theory was certainly too limited to serve as a basis of a new system of Individual Psychology, his personal contribution has proved invaluable for all the subsequent research work conducted by the strict Freudians themselves.

Adler's theory centres around and is dominated by one single idea, derived from Nietzsche's philosophical system. Nietzsche considered that the Will to Power represents the greatest impulsive force in the development of human beings and furthermore interpreted it as underlying all events connected with mankind. He pointed out that desire in human beings is nothing but power and that it therefore represents a continual fight against weakness and inferiority. This idea was taken up by Adler, although he handled it in a different way. According to Adler, the child wishes to become a man, but the woman also wishes to be a man, as the man is regarded as the stronger. This complex was termed by Adler the 'masculine protest'.

Adler's conception proceeds from the fact, which could also be demonstrated experimentally, that in the human organism every

defective organ or system shows a tendency to over-compensation. That is the reason why we very often find that it is just the so-called *loci minoris resistencia* that show increased productivity, because deficient organs are impelled to a strong exertion and thereby acquire increased adaptability. Such instances of organic inferiority, mostly inherited, occur in various organic systems. They may take the form of motoric insufficiency or of deficient functioning of the hormonal system.

This conception of Adler's is of general application. It is an exemplification of the law of action and reaction. We know that a muscle, if unused, will degenerate, leading to atrophy. On the other hand, an organ which, owing to its inherent weakness, has to fulfil a greater task, will become hypertrophic. Generally speaking, every stimulus exerts a trophic influence. The more powerfully and regularly an organ is irritated the greater will be its efficiency. That is why very often a diseased organ becomes more vital, more efficient, more capable of development than if it were healthy. Sometimes a diseased organism can be made to fulfil the same rôle as a normal one, as the result of extraordinary training. This attribute applies both to single organs and to the organism as a whole. Finally, this conception explains various well-known phenomena, such, for instance, as can be seen in artists, particularly in actors and musicians, who retain their youthfulness and reach a very great age, because they live in a continual state of abnormal tension and stimulation. Is it not more than a coincidence that a conductor like Weingartner, who reached the age of seventy-nine, worked until the very last minutes of his life; that Moriz Rosenthal, the world-famous pianist (the last pupil of Liszt), should to-day at eighty-four still be playing in public? And many other instances could be given.

On the other hand, we are always confronted by one other fact, namely, that as soon as a man retires and gives up his work, he suddenly becomes old and collapses. This clearly indicates that the life within the realm of the cells needs the tension resulting from friction, resistance, and last, but certainly not least, from polarity.

But it should not be thought that this whole assumption is only based on speculation. On the contrary, there are definite concrete facts which prove its correctness. If the tail of a lizard is cut off, it not only grows a new tail, but one that is thicker and stronger than the old one. The faculty of regrowth possessed by earthworms is a matter of general knowledge. Moreover, a certain type of sweet-water polypus, if decapitated, grows two new heads, for which

reason it is called *Hydra*. This case of the Lernaci *Hydra* serves to show that myths usually possess a solid scientific foundation.

There are many other facts which indicate that disease may lead to increased functioning. One of the most striking instances is that of a type of carnation. It becomes unisexual through degeneration of the stamens, but if infected by a parasitic fungus it regains its bisexuality. And in this connection I might draw attention to a rather strange phenomenon from human life. Gretry, the creator of the comic opera, started to compose on the same day that a heavy beam fell on his head, after which time he wrote about fifty operettas. Similarly Mabillon, the founder of the scientific research into origins, became a very famous scientist after receiving a severe injury to his head. These examples may sound fantastic and somewhat unconvincing, but they are uncontested facts, which can easily be explained to-day from the present state of our scientific knowledge. Our power to work is controlled by the hypothalamic region of the brain. The above-mentioned injuries doubtless led to an over-compensation of this organic system, viz. to over-functioning of the hypothalamic system.

Certainly it is not the stimulation or irritants alone that are the cause of the increased development of an inferior organ. To-day it must be accepted as a general law that any inferior organ has the tendency to overcome its inferiority by over-compensation. Adler drew attention to the well-known fact that Demosthenes was impeded in his speech by stammering, and this is only one instance of the way in which physiological defects lead subsequently to extraordinary accomplishments by the affected organ. Thus again many of the greatest actors in private life are helpless and shy, and it might be mentioned in this connection that Leonardo da Vinci, as well as Holbein and many of the greatest painters, were left-handed. Another interesting instance of over-compensation is seen in persons who are unusually short in stature (Attila and Charles the Great were small and stunted, and both Frederick the Great and Napoleon were unusually short). It was just this bodily handicap that stimulated their tremendous mental energy and led to over-compensation through will power. Nor is it devoid of interest to recall that the great courtesans, such as Ninon de Lenclos and Pompadour, were not beautiful, but rather the reverse. In compensation, however, they developed a remarkable power of attraction. Finally, everybody knows that Michelangelo, who was decidedly ugly, became the greatest sovereign in the realm of beauty, and that Lord Byron, who was handicapped by a club-foot, was an adored and unsurpassed master of perfec-

tion of form. And is it not profoundly symbolic that the greatest of all musicians, Beethoven, after he had become deaf and in the face of that physical handicap, created through over-compensation his greatest works, even though he was unable to hear them? Should this tragedy not open our eyes and ears to the wonders of nature? Did not the ancient Greeks realise all these inter-relationships when they invariably portrayed their great seers as blind? Even Homer, the all-embracing, sun-intoxicated eye of the world, was blind.

Thus there is no doubt that the inferiority complex plays a highly important part in all psychological problems, for we must accept the fact that the mechanism of over-compensation is instrumental in building up a personality. This same mechanism it is which renders intelligible many of the outstanding figures in history, their attitudes and their influence in shaping historic events.

### III

#### THE TASK OF RELIGION

**H**OWEVER, if we wish to answer the question as to how we are able to accomplish the task of sublimating our basic instincts, we shall have to turn our attention to another subject, one of profound importance, namely, Religion.

Religion is indispensable to humanity, and should be understood as a bio-psychological value. The more we know about our instincts, the more do we realise how great is our difficulty in governing and controlling them. It is certainly no easy task to deal with these instincts and to convert them into the elements of our spiritual life. Only through religion can we achieve this process of sublimation.

Although the individual has the power to sublimate his instinctive desires,—and the higher his cultural standard the greater will be his power to do so—a superior external force is needed to stimulate this power into action. This indispensable element has been provided by the various forms of religion which have issued to mankind prohibitions and commands, the purpose of which has always been to dominate the instinctive human impulses. Prophets, saints and saviours have arisen to assist the forces of sublimation by awakening and cultivating the godlike in man.

If, from the start, mankind had not felt the urge to kill, destroy and steal, the commandments 'Thou shalt not kill', 'Thou shalt

not steal' would never have been necessary. If love instead of hate had been the original attribute of man, the Jewish and Christian religions would not have based their dogma on the doctrine 'Love thy neighbour as thyself', nor would they have taught people to believe in miracles in order to awaken in them a sense of the mystic, the faculty of imagination. To assist mankind to attain a higher state of development, ideals were needed, and these have been provided by mysteries, legends, sagas, fairy tales, fiction and art. In fact, one of the chief tasks of religion is to stimulate our fantasy,—one of the richest endowments of the mind and soul. Mankind needs symbols, needs vision.

Our ideal concepts, our imagination, our ideas nourish us no less for action than do the vitamins and the nutrients of our daily food. Without religion there can be no genius, and every genius always was and always will be a believer. The world owes its civilisation primarily to its Christian outlook, the ethical basis of which is rooted in the Old Testament.

One of the chief ends of religion, therefore, is to elevate our moral standards, by converting all those natural and bestial instincts which are bent on destruction, envy and selfishness into constructive forces beneficial to human society.

The instinctive urges in man are inseparable from his higher personality. The erotic impulse in its more elevated form is a powerful influence for the promotion of culture through the sublimation of libidinous into mental energy.

Since, then, our mental energies and our achievements in sublimation are deeply rooted in religion, every biologist and psychologist must insist upon the fundamental need of religion. In other words, it is essential that we learn to appreciate the fact that religion has a biological rôle to fulfil, a rôle vital for the cultural development of mankind. If all natural instincts were given free rein they would inevitably lead to catastrophe, both in the individual and in the collectivity, that is, in the multitude of individuals.

Therefore every philosophy which proclaims atheism and anti-religion, as, for instance, that of Nietzsche, can produce nothing but a despairing *Weltschmerz*, which sooner or later will lead its adherents to such a state of mental disequilibrium and breakdown as will unfailingly culminate in the chaotic conditions which have been produced in Germany. For every people deprived of religious education and spiritual guidance is bound to decline to a state of barbarism.

## IV

## ARTHUR SCHNITZLER

AT the time that Sigmund Freud was striving to elucidate the symbolism of our Unconscious, through which he laid the basis for the whole of modern psychology, another man was showing us the complexity of the soul and was contributing through his artistic work to perhaps an even greater psychological understanding of the human ego. This man was Arthur Schnitzler. Schnitzler might justly be called the 'dramatiser of Psychoanalysis', and in this connection it is certainly worth while noting that Freud later stated that Schnitzler's poetic intuition had led to some of the same discoveries as his own researches.

Schnitzler's work can only be correctly understood and valued if we realise that he was a physician.

He belonged to an old family of doctors. His father was one of the leading professors of the Viennese University, specialising in Diseases of the Throat. His brother became one of the outstanding surgeons and also attained a professorship at the University of Vienna. Arthur Schnitzler himself studied Medicine, received his doctor's degree and wished to specialise in Psychiatry. His main interest centred around the recent discoveries in Hypnotism. He was profoundly influenced by the works of Krafft-Ebing, Charcot and Lombroso and he regarded Freud's translation of Charcot's lectures as masterful. As the Editor of the *International Clinical Review* he contributed several articles on the subject of Psychotherapy. This position he retained until 1894, but in spite of his interest in psychiatric problems and medicine he later abandoned the medical profession for the domain of literature, for poetry and dramatic art.

Nevertheless, his medical outlook, his knowledge of Psychiatry, could not but enhance his interest in psychological problems, and this always dominated his literary work.

It is significant that in every physician whose daily work confronts him with mortality the problem of death is more or less always in the background of his mind. That is perhaps the reason why in all Schnitzler's writings there lingers the problem of death.

One of the most characteristic features of Schnitzler's dramatic work is his attempt to show the intermingling of Love and Happiness in all their manifold conflicts, associated with the subconscious fear of death. One of his heroes asks a question: 'Is there any

intelligent human being who in happy hours thinks in the depths of his soul of anything else save death?' Or let us quote his explanation of the contrast between life and death: 'Your beautiful body which I now hold in my embrace, and through which warm blood pulsates, will soon be merely a thing, even less than a stone. For a stone remains what it is, if I throw it down. You, however, now fragrant and trembling, a source of intense desire and tingling sensation to all who see you, will become an object of horror, an object evoking disgust on the morrow and danger on the day after to-morrow, an object to be buried next to other rotting bodies in order to protect the living. And I myself, even I would shudder at the thought of holding your breathless self in my arms, though your hair and clothes may still be fragrant.'

His whole aspect towards life was determined by the problems of the soul. His main task was to search into the depths. He regards the emotional instability of our being as an essential attribute of human nature, but he remained intransigent and without compromise regarding love, for 'to love means to exist for someone else'.

Our psychological understanding of human affairs, with all its manifold conflicts, was therefore perhaps more deepened and significantly influenced by Schnitzler than even by the research work of Freud. It could rightly be said that Schnitzler's intellectual spirit and high moral standard, and his uncompromising reverence for truth, worshipped the artistically-minded youth of our own generation. His books, his deep understanding of the whole human being, his impressive appearance, and later the privilege of a personal friendship, all these have illuminated my path, have enriched my life, have broadened my outlook and deepened my understanding of all human problems.

In his attempt to search into the soul of man and to elucidate the whole complex of the feelings and tendencies within our being Schnitzler showed the immense importance of the subconscious which governs all our impulses, actions and unfulfilled longings. As in a kaleidoscope he showed up the soul with all its light and darkness, joys and tragedies, all the various emotions of the spirit, visualising always and everywhere the chaotic state of the soul.

'There is,' to quote Schnitzler's own words, 'room in us for so much at the same time: love and treachery, faith and faithlessness, adoration of one person and longing for another or even for several others. We have tried our best to introduce order into our lives, but this order is after all something artificial. Our natural state is chaos. Yes, indeed, the soul is a vast panorama.'



This chaotic state of the soul is nothing but a reflection of Schnitzler's own complexities. As a member of an upper middle-class family he was prevented from experiencing the frivolities of youth and love. To this is attributable the subconscious fascination which that magic world always had for him, the world of spring and colour and adventure, a world in which Schnitzler was never quite at home. The older he became the more did these opposing yet complementary elements in his being assert themselves. His nature indicated dualism, for there were always two dominant poles in his personality.

These are the two focal points in all his works, because in all the characters he drew there is to be seen an ambivalence of the feelings, as shown by Freud. This ambivalence corresponds to the bi-polarity within us. From this angle Schnitzler understood light-heartedness and melancholy, not as contradictions, but as associated qualities. Frivolity represents a defence against the melancholy side of our nature.

Schnitzler's dualistic nature converted him into a doubter and questioner and led him to adopt a definite attitude on many problems, as, for instance, that no one is permitted to take the life of another. From this axiom a main question arose, as to whether or not a physician should have the right, if requested by an incurable patient, to relieve his suffering by the administration of poison. Schnitzler was full of moral scruples and very often he pleaded that such relief should be granted by a doctor to an incurable patient. One day he discussed this question with me, insisting that after all a doctor must also give his help to anyone who is anxious to be relieved by death. I strongly opposed this idea, and stated that no one could definitely know whether a disease was curable or not. I asked: 'Will an incurable illness of to-day not perhaps be curable to-morrow? Have we not sufficient proof of the limitations of our own knowledge and at the same time of the steady advance in science? Did not a difficult case of diabetes which until yesterday was regarded as fatal become curable over-night, as the result of the discovery of Insulin? Have we a right, as you suggest, to terminate an advanced state of creeping paralysis when we have experienced the miracle of Wagner-Jauregg's malaria therapy through which this hopeless disease, which formerly compelled patients to end their lives in mental hospitals, is to-day quite curable?' Schnitzler patted me on the shoulder, and with a very grave expression replied, quickly and abruptly, 'You are right. Now you have convinced me.'

By virtue of his psycho-philosophical outlook Schnitzler has

become distinguished among all his contemporaries. This explains his zest in dealing with all the manifold problems concerning the relationship between the two sexes. The problem of faithfulness and infidelity is stressed again and again and viewed from many different aspects. Freud's research showed that all our urges are dictated by and based upon our unconscious instincts. Schnitzler's work embraces the same problems, but he treats them from an artistic and intuitive angle. Freud analyses and disintegrates the elements of the soul, while Schnitzler constructs living human beings out of the re-synthesis of these elements. Freud breaks down and explains, whereas Schnitzler reconstructs new living forms. Freud analyses the phenomena of life, whilst Schnitzler, after extricating and illuminating the elements of the soul, presents life itself. But he never destroys life.

The difference between Freud and Schnitzler is based upon a very important attribute. If we ask wherein lies this difference we can supply an explanation which is of general applicability. Schnitzler's soul was steeped in music, whilst Freud was entirely unmusical. Freud's work is of a strictly mental order; everything is filtered through his brain. But Schnitzler by means of his musical intuition perceived everything through his artistic feeling. Music guided him in all his thoughts and activities. Indeed, it can be said that this particular difference always constitutes the main distinction between a musical and an unmusical person.

Freud demonstrates that our dreams are merely the symbols of our unfulfilled wishes, but according to Schnitzler our unfulfilled wishes are not less destructive of human happiness than is definite infidelity. Where should we establish the line of demarcation at which unfaithfulness begins? In his opinion a wayward thought or a mere longing is already a sign of unfaithfulness. He showed that the dream life and wakeful life can never be sharply distinguished. He emphasised with overwhelming clarity the existence of a universe of ideas and images latent within us, to which we surrender ourselves from the moment that reflection first awakens in our minds.

Schnitzler never tired of emphasising that the joy of life should be the prime concern of every individual, even though in his works the element of death always lurks in the background.

But in his own words 'all that is life and movement, all that stirs up the soul, is a fragment of joy'. When one of his characters was asked by his friend why he had lost all desire for work he received the reply: 'My dear friend, if you were to lie for weeks, as I did, waiting for the end, and were then to recover, as I did, you would

see whether after that you could feel anything but the bliss of breathing again, of belonging to all that grows and blossoms, of speaking again, as others do, of days to come. I desire nothing but to live. This feeling of being alive suffices me.'

Schnitzler never generalised. He believed that all conflicts must be viewed from an individualistic angle. His whole attitude was an attempt to show that every human being is unique and that everyone therefore possesses a destiny of his own. Whenever we discussed modern medicine he always focussed his interest on the problems of Fate, of Destiny, as a super-individual force. The more he learnt about the new developments in Endocrinology, the more interest did he show in the intermingled play of the hormones. He very soon came to realise that the psychoanalytic symbolism could not survive, in view of our advanced knowledge about the interrelationship between our state of mind and hormonal control.

I shall never forget one Easter Sunday. Schnitzler had invited me to take an early morning walk with him through the Wiener Wald. I was still under the impression of a most magnificent performance of 'Carmen' that had been given at the Opera House the previous night. We discussed music, conductors and 'Carmen' in particular, from which we proceeded to discuss the psychology of Carmen's character. This in turn led to a general discussion of various psychological problems, whereupon Schnitzler asked me to tell him something about my own research in connection with the various biotypes. In doing so I was obliged to make reference to the allergic phenomena and the entire allergic mechanism, and in the course of conversation I expressed my conviction that the opinion of official medicine regarding Homœopathy was entirely erroneous, and that it was our duty to abandon once for all this outmoded prejudice. I said that the more we knew about allergy the more homœopathically minded did we become. Schnitzler was particularly interested in this aspect of the subject, as he had always been a profound admirer of Paracelsus. When at last I stated my opinion that the mind also can be rendered allergic, he suddenly stopped still in the manner so characteristic of him and said, 'How interesting are your explanations of the allergic phenomena. This is all quite new to me, particularly your conception that the soul can also be allergic. I never anticipated such a thing, but I entirely agree with you that there does indeed exist a definite allergy of the soul.' When I remarked that Medicine can only be applied individually, he replied with a smile, 'Then even I was not so far wrong when years ago I wrote: "The medicine

that cures in one patient may act as a poison in another." Did I not in this way already indicate the principles of allergy?"

As our talk next passed on to the usual discussion of fate and destiny, I mentioned the importance of Wilhelm Fliess' conception of Biology. I attempted to show that our unconscious is governed by the hetero-sex compound within us and that our life is partly under the control of a biologic destiny. The whole theory of Fliess was new to Schnitzler, but it interested him profoundly and he immediately grasped its significance. Suddenly he again stopped and, looking at me with his large blue-grey eyes, he said, 'Do you know, you have impressed me by your profound understanding of human nature. Now if you, in the course of your medical experience, have come to the conclusion that human beings should and can not be judged by common standards as being either good or bad, because they are governed, as you maintain, by the hormones, by their anergic or allergic condition, and if you think that the whole realm of the subconscious has a biologic basis, this offers a much more profound explanation of all our instinctive life than does the theory of Psychoanalysis.'

In this connection Schnitzler mentioned his 'Paracelsus' and said, 'I think I was right when I put these words into the mouth of my Paracelsus.' Whereupon in his wonderful voice Schnitzler quoted these words: 'It was play. What else should it be? What is not play that we carry on here below, though it may seem great and deep? One person plays with hordes of wild soldiers; another with superstitious fools; still another with sun and stars. I play with human souls. Only he who looks for a meaning finds one. Dream life and wakeful life, truth and fiction flow into each other. Certainty is nowhere to be found. We know nothing of others, nothing of ourselves. We play always. He who realises this is wise.' I was deeply impressed; it was an unforgettable moment.

He continued that, in his opinion, even human relations have their sicknesses, but this kind of sickness can also be cured, and realising this truth we should avoid the terms 'immorality' or 'crime'. Human beings are impelled by super-individual power. The ebb and flow of their emotional lives is merely determined by fate. In his opinion there exists one crime only, namely, the offence against humanity, against justice and personal liberty. He was always striving for tolerance, and hence he was very interested when I told him that allergy is nothing but a feature of biologic intolerance. The term 'biologic intolerance' appealed to him very much.

He continued: 'I agree with your attempt to view the organism

as an entity. I appreciate your wish to apply your medical outlook to acquiring a better understanding of the mental states.' These words I cherished greatly, and from that day on I used to meet Schnitzler nearly every week, if only for a few minutes, for he wanted me to tell him about some of my observations and difficult medical cases. And I was very proud when one day he sent me his photograph with a very flattering dedication. I deeply appreciated the distinction of being in direct contact with a man whom I had so greatly admired from my earliest youth, but whom I had never dreamt of knowing intimately.

Arthur Schnitzler possessed wisdom to a degree rarely seen, and this is reflected in all his works. When, for instance, he asks: 'What is Fame? What is Wealth? Fame—ten years—a thousand years—ten thousand? Tell me in which year immortality begins, and I will trouble myself about fame. Wealth?—ten guilders—a thousand—a million? Tell me how much the world can be bought for, and I will labour for wealth. At present the difference between poverty and riches, between oblivion and fame, is so slight that it is hardly worth my lifting a finger for it.' By quoting these words I feel everyone will agree that what he writes is much more than poetry; that it is profound philosophy.

If to-day we survey Schnitzler's work we are compelled to admit that he raised the moral drama to the greatest artistic height ever attained in literature. His personages do not show one or two characteristics, but represent a conglomeration of different souls in continual juxtaposition and contradiction. Nevertheless, the underlying structure of each personality displays a symmetry of its own. It is to his credit that in all his novels and plays he exposed the structural elements of every character.

Though Schnitzler was a determinist who recognised that we must all bow to necessity, he nevertheless refused to submit to the accepted doctrines of the day. In his opinion no written or unwritten laws should be accepted, but everyone should in all things follow the dictates of his own personality, in accordance with the law of his own being, irrespective of moral taboos or social prejudices. Only then can a person attain true freedom, and this Schnitzler regarded as the prerequisite for the understanding of oneself and of the world about one. But as long as a person is untrue to himself he is unable to enter upon the path of freedom.

It is very interesting to see that Schnitzler expressed the same opinion that Jung emphasised later in his philosophic system.

Every one of his characters is seen to be a representative of a certain type, living and acting in accordance with an inner law of

his own being. Schnitzler conceived that the boundaries between right and wrong, good and bad, are undefined.

He had both the courage and power to penetrate into the secret recesses of the subconscious where he sorted out and demonstrated those important and contradictory trends and polarities, the scientific discoveries of which have been demonstrated by Freud. Schnitzler thereby transmuted his psychology into life, for he rendered the soul transparent. Through his penetration into the depths of the soul, Schnitzler deserves to be called 'the dramatiser of dynamic psychology', as Freud was its creator.

In all his novels and plays he tried to describe the social structure of the Vienna of the *fin-de-siècle*, and he illuminated all its conflicts and depths. Thereby Schnitzler has contributed a psychological portrait of this fascinating and interesting cultural period.

He not only realised the struggle existing within our soul, but he pointed out the presence of various different egos within our being, as is shown when one of his characters remarks: 'Somewhere in my soul I felt myself guiltless. And elsewhere, perhaps deeper in my soul, I felt myself to be guilty, and still more deep down again I felt free of guilt. It all depends upon how deeply we peer into ourselves. And if the lights of every storey of our soul were lit up we should find ourselves at the same time guilty and innocent, cowardly and heroic, foolish and wise. For depth of insight does not lead to clarity, but rather to a realisation of the abysmal confusion within us.'

Schnitzler was always opposed to vagueness, and he condemned approximate valuations. He believed that every person should discover the world and his own self anew each day.

Having shown in the chapter dealing with Freud the distinction between the different types of ego, we realise that Schnitzler in his own way was solving the whole problem of the psychology of the ego.

More than this, he also anticipated the whole phenomenon of over-compensation resulting from an inferiority complex. Therefore for him Adler's psychological theories were only a confirmation of his own ideas. He fully realised the fact that our will power is due to this subconscious inferiority.

'What is heroism or courage in the face of Doom?' he asks, and in reply he makes an old veteran say to his patriotic Austrian comrades who are leaving for the front to fight Napoleon, 'all your merriment and all your enthusiasm are at bottom merely sublimated fear, yes, hellish fear. Courage, heroism, all these are

words,—words. Nevermore to gallop over a field at dawn with the brightening heaven above you; nevermore to hang on blossoming lips with the fragrance of trembling breasts wafted about you; nevermore for you the sound of a living voice, nor the sparkle of sunlight and starlight; to sink and bleed away; to end and be buried for all time. If this does not make you shudder, my friends, then you really understand neither Death nor Life.'

Schnitzler felt very deeply the danger to which during the past few decades social life had been subjected through the influence of all the various anti-individualistic tendencies. He protested against the ever-insistent cry of Service and Sacrifice. It required all his integrity so courageously and firmly to raise his voice of protest and condemnation against those anti-individualistic tendencies, at a time when it was rather fashionable to assume that everything should be sacrificed to the state. Realists, romanticists and expressionists all have contributed to our having to suffer and to die for the sake of the state. Schnitzler strongly opposed everything directed against individualism, because he maintained that the healthy organism can only be built up by healthy cells, and that therefore a healthy society can only be based upon happy beings. 'It is one's right,' he said, 'to live one's life fully, with all the ecstasy, with all the shudders that may lie concealed therein.' He also opposed martyrdom, because in his opinion martyrdom is a personal matter, a question of faith, which proves only the intensity of one's own faith, but never the correctness of that faith. The martyr compels others to believe in his own capacity for sacrifice, but never to accept the same belief on their own behalf.

The main demand Schnitzler made on mankind was to fight against spiritual inertia, and as he loved youth he thought that the young above all should enter upon life as though coming into a wonderful garden of interwinding roads, with open eyes and an alert mind, each day re-awakened to the wonders of the world.

As we look back at Schnitzler's personality, distance sheds added light on his work. He fertilised psychology. He enlightened our path. Through him the soul became integrated.

Sigmund Freud and Arthur Schnitzler have shifted our general outlook and have shown that the human mind is governed by the interplay of the complex elements of our subconscious. In this way they shattered the frames confining many of the accepted ideas of the time.

## V

## WILHELM FLIESS

**M**ODERN Psychology is characterised by a psychological-analytic outlook, and we have seen in the case of Arthur Schnitzler how greatly such a psychological outlook can influence a writer in building up the characters of his imagination.

But in order to understand human events we must properly understand, not only psychologic, but also biologic phenomena. We must bear in mind that there is no hard and fast line between the psychic and the physical domains, but that all psychologic phenomena are based and dependent upon biological facts.

In order to demonstrate that tradition is one of the most fundamental principles of Biology I cannot do better than to present the reader with a brief survey of the theories of Wilhelm Fliess, as an aid to a comprehension of the biology of the subconscious.

But I have an additional motive in discussing the biological concept of Fliess, for, strangely enough, very few people know anything about it. It seems therefore particularly advisable to have some knowledge of this theory, as an aid to a better understanding of the link which connects the various members of one generation.

At the time when Sigmund Freud was delving into the profundities of the human soul, as a result of which the whole of Psychology was revolutionised, Fliess was searching into the biological depths of life.

As a young doctor he worked at the Neurological Institute of Vienna where he became a close friend of Freud, and later they met again in Paris where both worked under Charcot. Whilst Freud settled in Vienna, Fliess became one of the most highly esteemed and successful practitioners of Berlin.

It is not without interest to note that one year after Freud laid the foundation of his Psychoanalysis in 1896, Fliess published his new discovery which became the basis of his subsequent theory of Biology. In 1897 he discovered the relationship existing between the female sex organs and a circumscribed region of the nasal membrane, which he designated 'the nasal sex organ'. On this observation are based all his further investigations, which he published in 1906 in his book entitled *The Course of Life as an Exact Foundation of Biology*. This book produced an immediate sensation. His theory shattered the whole pre-existing conception of Biology,



for Fliess attempted to explain the law underlying all the vital phenomena of life. He was primarily attracted by the riddle of the sudden and unexpected occurrence of many biological phenomena, both of a physiological and a pathological nature. He rejected the idea of mere coincidence in natural phenomena and therefore tried to penetrate into the problem of biologic causation.

Fliess tried to divine the inner law controlling all life, the life of all living beings. His concept was that all life functions in accordance with an internal mechanism which he showed to be identical in the case of human beings, animals and plants. According to this mechanism the hours of our birth and of our natural death are pre-determined.

How often are we struck by the sudden or explosive onset of an illness, whether this illness is infectious in nature or characterised by an unexpected attack, regardless of the special nature of that attack (asthma, gall bladder, kidney, etc.). Why this unexpected attack? Why this sudden outbreak of infection on a particular day, since we are always surrounded by germs? Should there not be a rule, a biological explanation of all these striking yet unexplained phenomena? Or are these irregularities merely due to an error of nature?

In his endeavour to establish a biological determination of these irregularities, Fliess did not base his work on painstaking laboratory research; neither are his observations the result of innumerable animal experiments. He did not even use a microscope. He employed one instrument only, his intuition, his vision, and this he applied to its fullest capacity for the observation of life itself, viewed from his special aspect of a physician. This vision of a genius enabled him to observe, to listen to and to understand Nature. It can be imagined how revolutionary was the resultant doctrine that all life pulsates and possesses a rhythm of its own.

During his studies on menstruation Fliess noticed the well-known fact that the intervals between the menstrual periods are often irregular. Nevertheless, he was not satisfied with merely noting this fact, but proceeded to examine the various intervals occurring between menstruation. To his great surprise he found that these intervals were always of either 23 or 28 days. This observation led him to assume that the intervals of 23 and 28 days must have a biologic cause. Was it possible, he asked himself, that 23 and 28 represented a biologic phase, an interval of basic biological significance? Fliess concluded that the individual intervals between menstruation were perhaps to be understood as governed, not by one, but by two distinct rhythms. He continued to search

into this problem and whilst at first he noted this phenomenon only in connection with menstruation, he later found, to his surprise, that these two periods of time could also be observed to occur in all forms of life, in plants and animals, as well as in human beings; he found, moreover, that they were not only associated with normal physiological, but even with pathological processes. Fliess demonstrated that these two periods of time were a characteristic of living substance in all its manifold manifestations.

He conducted many thousands of observations in connection with physiological and pathological, as well as with psychic phenomena. His findings led him to conclude that living substance pulsates in harmony with and in dependence upon the rhythmic cycles of the whole cosmos, and he definitely established the fact that this rhythm is characterised by the two periods of time of 23 and 28 days respectively.

One of his many instances recorded is of a *Clivia*. Fliess states that 'this plant sent out four shoots which opened, respectively, on the following dates:

- (1) Nov. 10, 1901.
- (2) Dec. 8, 1901.
- (3) Jan. 5, 1902.
- (4) Feb. 2, 1902.

'Next, a bud appeared on this *Clivia* on Feb. 25th, 1902. The flower opened out on March 20th, 1902, and dropped off spontaneously on April 12th, 1902.

'The above intervals of time are:

Nov. 10	28	days.'
Dec. 8	28	
Jan. 5	28	
Feb. 2	23	
Feb. 25	23	
Mar. 20	23	
Apr. 12	23	

Fliess gives many similar illustrations from animal life, and regarding this phenomenon of periodicity in connection particularly with human beings, he records in his book *The Course of Life* numerous instances of the onset of illness on particular days, with adequate explanations.

Wherein lies the central point of interest in this discovery of Fliess?

In speaking of an hour which is expiring one is naturally re-

mind of the mechanism of a watch with its spring action. But there is a profound difference between the running out of a watch and the course of living substance. Living processes proceed irregularly, whilst a watch has uniform motion, one hour resembling another in every way. Thus the periods between the births in a family vary greatly. The duration of the various pregnancies of one mother fluctuate. The individual blossoms on one tree burst into bloom at different times. The breeding of animals and the beginning of the birds' migrations fall every year on a different date, regardless of the influence of temperature. Why does the death of a grandparent so frequently coincide with the birth of a grandchild, and why do children often suddenly become ill when the mother starts to menstruate?

Because of this lack of uniformity biologists have hesitated to admit that the precise initiation of natural phenomena was determined by inner causes. On the contrary, a wide field of influence was attributed to external factors, ranging from the weather to the will of God. Owing to the fact that it was impossible to find a rule of general applicability, these phenomena have usually been ascribed to mere coincidence. But this did not suffice to account for natural occurrences. By coming out too early the blossoms often err as greatly in their calculations as do the swallows, and in many years even an icy blast will be powerless to induce the dwellers in our towers to migrate to the warm south, provided they have not yet felt the inner urge. Investigators have not failed to note these numerous instances of irregularity, although they have not yet found a solution of the problem. But Fliess asks: 'Does lack of uniformity of movement indicate the absence of a controlling law? Are not phenomena such as a natural fall, projectile motion, the rotation of the earth around the sun all non-uniform movements? And have not the Galileos, the Kepplers, the Newtons revealed to us their underlying laws? Certainly they have. Hence lack of uniformity alone can never permit the assumption of the absence of law.' But there is a second characteristic peculiar to living processes which differentiates them from all others. Not only do they lack uniformity of movement, but they are also unsteady in motion. They proceed erratically, spasmodically, by fits and starts.

This erratic movement is a significant feature of both physiological and pathological occurrences. Suddenly the first menstruation starts; suddenly labour pains begin; suddenly a child takes his first steps, and suddenly he starts talking. This suddenness and unexpectedness of onset represents an exceedingly important

characteristic of all living substance. It was the clue which enabled Fliess by means of elementary methods of mathematical calculation to establish the astounding fact that all these irregular intervals between biologic occurrences are governed by the two constantly recurring periods of 23 and 28 days.

As stated, this great scientist rejected the idea of mere coincidence and his work represents the first attempt to penetrate into the whole problem of biologic causation. Let me say that in my opinion Fliess' biologic theory is as important as Freud's doctrine of Psychoanalysis. Moreover, it is to his credit that we possess a biologic basis and explanation of Freud's assumption of the subconscious. Fliess concluded that these two periods of 23 and 28 days are characteristic of the two main principles of all living substance, namely, the male and female principles. Since he could establish the fact that these two periods occurred in every physiologic and pathologic process, he concluded that they were associated with the male and female principles within our being. He formulated the theory that male and female substance pulsates within the being of all individuals, and from this he drew the further inference that all living substance and consequently all individuals must be bisexual. Fliess must accordingly be recognized as the originator of the theory of bisexuality.

I was deeply impressed and fascinated by this revolutionary book of Fliess. Two years after its publication in 1908 I had the privilege of making his personal acquaintance, as he was the physician and personal friend of my sister in Berlin. From that time on I was in close touch with him for several weeks every year.

I shall never forget my first meeting with Fliess. I must admit that I was somewhat taken aback and shocked at the first sight of this man with whose work I was already well familiar. He had the appearance of a gnome. He was extremely reserved and most difficult of approach; moreover, he was intensely vain and egocentric, and despite his excessive politeness he was both unprepossessing and uncompromising in manner. But as soon as he started to speak about his work the whole atmosphere underwent a complete change. Although I was very young at that time and at the very beginning of my medical studies, as soon as he noticed my interest he gradually thawed and did not hesitate to communicate to me his whole biological concept.

Fliess explained every detail to me and even permitted me to study all his records. He said: 'My biological theory is very simple, because it needs nothing but observation and common sense. A person has only to open his eyes and look. You will cer-

mind of the mechanism of a watch with its spring action. But there is a profound difference between the running out of a watch and the course of living substance. Living processes proceed irregularly, whilst a watch has uniform motion, one hour resembling another in every way. Thus the periods between the births in a family vary greatly. The duration of the various pregnancies of one mother fluctuate. The individual blossoms on one tree burst into bloom at different times. The breeding of animals and the beginning of the birds' migrations fall every year on a different date, regardless of the influence of temperature. Why does the death of a grandparent so frequently coincide with the birth of a grandchild, and why do children often suddenly become ill when the mother starts to menstruate?

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I shall never forget my first meeting with Fliess. I must admit that I was somewhat taken aback and shocked at the first sight of this man with whose work I was already well familiar. He had the appearance of a gnome. He was extremely reserved and most difficult of approach; moreover, he was intensely vain and egocentric, and despite his excessive politeness he was both unprepossessing and uncompromising in manner. But as soon as he started to speak about his work the whole atmosphere underwent a complete change. Although I was very young at that time and at the very beginning of my medical studies, as soon as he noticed my interest he gradually thawed and did not hesitate to communicate to me his whole biological concept.

Fliess explained every detail to me and even permitted me to study all his records. He said: 'My biological theory is very simple, because it needs nothing but observation and common sense. A person has only to open his eyes and look. You will cer-

tainly very soon find out for yourself what I have discovered, namely, that all life pulsates in rhythm.' Proceeding to elucidate this theory and to show that our destiny is biologically conditioned, he stressed another important period of time, in addition to those of 23 and 28 days, namely, the annual period. I must have looked rather foolish and dubious at hearing this, because Fliess continued in a serious tone, looking straight at me: 'You must not be so surprised to hear this. Do you not realise that we are all only a part of the whole cosmos, a part of our planet which is governed by the daily and yearly periods? Do you not every year witness the opening of the leaves, the blossoming of the flowers, the spring time, the winter? Is this rhythm of nature not sufficiently significant, or do you really believe that our human life alone is excluded from such a rhythm? Is each individual not a part of the whole family substance which is the foundation of his whole generation? Since our living substance shows the existence of this rhythm I have concluded that it represents a biologic principle underlying all living substance. But what could the two principles involved be other than the two fundamental biological principles of male and female? Do we not owe our existence to the mingling of male and female units, and should not the fact that we are the product of both male and female substance continue to operate in the future course of our life? Should not such a fundamental biologic principle determine our biologic destiny and unfold itself in all the manifestations of life? Only scientific myopia could overlook this profound law, the law of the bisexuality of all living beings. As all life originates from the male and female principles, so also does all life pulsate in a rhythm that is dependent upon and controlled by both the male and the female substance. Moreover, all so-called accidents and abrupt occurrences are due to a biologic cause and the days of our critical periods are also governed by an inner law.'

Even to-day while writing these words I can feel the sensation of awe that overcame me upon hearing Fliess speak for the first time. I became conscious that I was in the presence of one of the greatest searchers into the mysteries of the universe. It is always a unique experience to meet for the first time a great man with whose work one has been acquainted for a number of years. At all events, I personally have always been deeply moved by such an experience. From the day that I first learnt of this new interpretation of biology it has remained in the background of my mind, and I have been constantly able in my daily medical practice to recognise and confirm the truth of Fliess' observations and theories.

As happens in the case of all new ideas, Fliess' theories were either ridiculed or ignored; at best they were received with cool scepticism. But I personally regard scepticism as both the cheapest and meanest way of reacting to new ideas, and I consider this quality a significant characteristic of mediocrity.

Let us consider for a moment the value, or rather, let me say, the greatness of this conception of bisexuality. Let us realise that at a time when nothing was known about the existence of male and female sex hormones Fliess stressed the principle of bisexuality, merely on the basis of his own observations and intuition. Scientific proof of this principle has only been furnished in recent years, since when male and female sex hormones have been shown to exist in all individuals. The experiments which definitely proved the bisexuality of all human beings were furnished by the Viennese physiologist Eugen Steinach, who demonstrated the presence of male and female hormones in every individual, thereby laying the basis of modern Hormonology. To-day the male and female sex hormones are chemically synthesised and are administered in everyday medical practice.

Even Fliess' first discovery in 1897 of the existence of a relationship between the nose and the sex organs in women has been only recently re-discovered by American endocrinologists. But they did not know and therefore did not even mention the name of Wilhelm Fliess.

In view of the revolutionary nature of these theories of Fliess it may make things more intelligible if I give some quotations from his own writings. I am sure the reader will feel that they are the utterances of a prophet, the language of a man of vision and inspiration, the conception of a biologic seer.

'Every generation represents a definite amount of living substance; each individual has received his share of it and lives at the expense of this substance. But this share comprises a limited number of living male and female units. One unit after another enters into the field of the living processes, runs its course like a clock and upon expiring calls into operation a new unit. And this occurs until the last unit is used up, whereupon the individual dies. As, however, each unit has an existence of 23 or 28 days, I am able to calculate from the age of an individual the number of units of which it is composed. The life of these units runs in a parallel course like that of brothers. But in the same way that the death of one member does not destroy an entire family, so also the death of one unit of inheritance does not cause the death of the whole individual.

'For this reason the particular day on which a parent dies does not leave the children unaffected. It sets its mark upon them, either visibly















or invisibly, whether we realise the fact or not. The living substance within us knows this, because it can feel it. These are the vibrations in our life which determine our physical and spiritual accomplishments. It is this fact which enables us to understand biological determinism.

'Death always disturbs the equilibrium of the family substance. If one member dies all individuals who are related by blood also suffer change. One frequently notices that the death of a parent makes the daughters suddenly age. In other cases they become rejuvenated or enter upon a new period of conception. The day of death becomes the periodic day of the family substance. The reinforced energy of the vital germ may be manifested in an onset of menstruation, but also, in place of the germ of life, a germ of infection may obtain easier entrance into the system and produce an infectious disease.'

Fliess interpreted in this light Frederick the Great's careless unconcern during the battle of Hochkirch, an attitude which is inexplicable in view of his greatness as a strategist. Frederick had been hard pressed and pursued by General Daun for three days. Although General Keith had drawn his attention to the danger and had made him entrench his camp, with the words, 'If the Austrians should leave us here in peace they would deserve to be hanged,' Frederick made fun of him and took no further precautions. He was suddenly unable to make any decisions. His strategical acumen, his keen statesmanlike perception deserted him. How was it possible that such a great strategist could neglect those grave circumstances? What was the reason why he could not come to any decision, and why could he reject the warning of a general like Keith? Historians have never made any attempt to explain this failure, ascribing it to mere chance or explaining it as a case of unaccountable negligence. The biologist, however, sees in this striking fault of omission, not a coincidence, but the working of a deeply rooted biological law. A slight incident occurred which has never been fully appreciated or even mentioned in history books. Merely a small coincidence, one would say, but from a biological aspect it was more than a little thing: it decided the fate of Frederick the Great. For it happened that the battle of Hochkirch, which he lost, fell on what, biologically considered, must be regarded as a periodic day in the life of Frederick the Great. His favourite sister Wilhelmine died on that day, without his being aware of the fact. She died and her death was a blow directed at his own living substance. That is to say, on that day his living substance sustained a shock.

From among a number of illustrations from horticulture Fliess quotes the potato grower, F. Boehse, as stating that 'every variety

of potato suffers an eventual lapse of its productivity and vigour, due to the fact that its reproduction is carried on, not through seeds, but by the asexual method of tuber propagation. The time of this deterioration varies, in accordance with the individual potato strain; but new strains, reared from seeds, must always be employed to supplant the expiring strains.'

Fliess further instances the case of an oriental pyramid-shaped poplar (cited by Ochsenius in *Prometheus*, 1904, vol. xii, p. 780) which was imported into Germany from the Orient and planted in the park at Dessau over 100 years ago. Ochsenius stated that all the poplars raised by cuttings from this one tree died at the same time, regardless of soil, temperature, insect pests, etc. He attributed this to the fact that all the trees had started from cuttings from the same mother tree, and noted that they all perished when the original tree died of old age. Ochsenius interpreted this phenomenon as due to the fact that this time of death corresponded to the natural term of life of the poplar, a tree which is not long-lived.

Finally, Fliess cites the always-recurring and familiar case of asexual reproduction exemplified by the epidemic-carrying bacteria. The sudden and enigmatic end of an epidemic, often at the very apex of its intensity, is due to the fact that such asexual reproduction shares with the principle of parthenogenesis the incapacity of indefinite propagation.

Fliess continues: 'It is moreover symbolically correct in the case of men and animals to speak of a genealogical tree. In the tree the connection between the generations is only more obvious because the individuals remain corporeally united with the trunk until the approach of winter. But winter is heralded from within and arrives on the appointed day on which, to quote the beautiful words of Sappho, "the last fruit on the highest tip of the tree, which is inaccessible to the gardener, automatically falls to the ground".'

The above quotations from Fliess show how deeply he penetrated into the profoundest problems of life. It was the first time that anyone had viewed and explained biologic phenomena from such an angle. Hitherto Biology had contented itself with describing facts, without attempting to interpret the laws underlying the phenomena noted.

Are there any additional significant aspects of bisexuality? This question Fliess has strikingly answered by his establishment of the connection existing between bilaterality and bisexuality. According to him bilaterality is to be traced back to the two sex principles operating in every individual. He was led to assume that



the left side in men is influenced by the female hormone, the left side in women by the male hormone. In all cases in which the heterosex element predominates the left side of the body is more accentuated or even more developed. This observation led Fliess to establish a biologic type which he called *Das Zwischenreich* and which to-day is well known as the 'intersex type'. This intersex type is the manifestation of bisexuality in which the heterosex element predominates, and Fliess elaborated the principle that the degree of intersex is dependent upon the relation between the male and female elements. With this theory Fliess may be said to have blazed the trail in two distinct directions. First, he succeeded in offering a biological explanation of left-handedness by demonstrating the interrelationship existing between the left side of the body and the secondary sex characteristics. Left-handed men show a greater proportion of the secondary female characteristics, whilst in left-handed women the secondary male characteristics are much more marked than in normal women. Secondly, he showed that the creative faculty possessed by artistic individuals is a characteristic of the intersex type, from which fact he deduced that our talents depend upon the heterosex element within us. But it is only to-day, with our advanced knowledge of Endocrinology, that we have been able definitely to confirm the fact that the female sex hormone in men and the male sex hormone in women are responsible for the form of our spiritual life and psychic attitude, as well as for our gifts and talents.

One of Fliess' most revolutionary and significant concepts is his interpretation of the parallelism existing between two of the most momentous biologic occurrences,—Infection and Conception.

'Infection and conception are both effected by a germ, which is only capable of developing during a determined period of time.

'Both conditions are followed by a stage of incubation (pregnancy); in both there occurs a process of sudden release (onset of disease, sometimes accompanied by rigor—labour pains); this is succeeded by a process lasting for a certain length of time (duration of disease—delivery), ending suddenly (crisis—birth), and terminating in a period of convalescence (child-bed).

'This analogy between infection and conception (mortal germ and vital germ) can be applied to all the essential characteristics connected with these two processes.'

Thus the biologic concepts of Fliess have clarified many problems which have never before been explained or understood.

In conclusion I must mention his fascinating interpretation of Euphoria. We know how often in the course of a serious illness it

happens that just before the catastrophe sets in a patient will suddenly experience an accentuated sense of well-being. This condition, which is known as Euphoria, was interpreted by Fliess as a highly significant biologic feature, and I think that a quotation of his own words will serve better than any commentary to demonstrate once more his greatness, both as a biologist and as a physician.

Referring to the play by Schnitzler, *Professor Bernhardt*, he says:

'Anyone who has read Arthur Schnitzler's *Professor Bernhardt* is familiar with the Euphoria, that enigmatic sensation of excessive well-being which precedes death. In the doctor's clinic is a poor girl suffering from a hopeless case of peritonitis. Suddenly her pain ceases and her body is suffused with a wonderful sensation of ease. She believes that she will recover and the doctor, anxious not to rob her of that belief, forbids the attendant priest to administer the last sacraments. Herein lies the conflict of this drama.

'Schnitzler, who was himself a physician, chose that particular disease in which the sensation of well-being preceding death is a well-known phenomenon of frequent occurrence. Perhaps an instance of apparent improvement more generally known to the medical profession is that accompanying pulmonary tuberculosis. But not a single medical text-book makes any mention of the fact that the "euphoric upward beat" usually precedes natural death. It is significant to note that Shakespeare was better informed on that point. He says:

How oft when men are at the point of death  
Have they been merry! Which their keepers call  
A lightning before death.

(*Romeo and Juliet*, V, 3.)

'And if we consult our common speech we find the words "One fine day he had a stroke". Not one bad day, as might be presumed. The day was really fine before the evil occurred.

'Many instances readily come to mind, such as the case of Richard Wagner who, on the evening before his death, related many amusing anecdotes to his doctor.

'But this increased sense of well-being does not only occur on the last day of life. The Euphoria preceding death is merely the most striking illustration. It occurs also in the course of life and before the outbreak of a disease, although in varying degrees of intensity. I have known children, radiant with laughter on leaving for school, sent home at 10 o'clock with a severe attack of scarlet fever.

'Fritz Reuter, the writer, said that pleasure was his most dangerous enemy. For whenever he felt particularly cheerful and comfortable a sudden change followed immediately afterwards.

'Thus we understand why the common folk-wisdom warns us not to boast of our well-being. The envy of the gods is very near.

'I am urged to recount one incident which made a profound impression on me. At the end of October, 1911, I happened to meet the writer Ludwig Pietsch, who embraced me in his impulsive manner with the words: "I am feeling most exceptionally well, more fresh and happy than for many years past. And if your theory is correct, my dear friend, the end must be near, for I have never felt so well!" All my protests were unavailing. "Yes, yes, I know you don't want to admit it," he replied. And actually my theory was confirmed, for on November 27th Pietsch drew his last breath.

'In his book *Great Men* Wilhelm Ostwald states having noticed that a painful state of exhaustion and a pathological condition accompanying a relaxation of tension invariably occurred once a man had fulfilled his "great task". After Davy had established the nature of the alkali metals he declined into a serious physical and mental state. Hardly had Julius Robert Mayer completed his work *Concerning the Mechanical Equivalent of Heat* than he was seized with an attack of delirium and jumped out of the window. Michael Faraday collapsed at the termination of his first important piece of work, only temporarily recovering his normal health. All these geniuses produced their master creations during a period of Euphoria. In every case this was followed by a breakdown.

'But why is it that Euphoria is intimately connected with a subsequent decline of well-being? And why is Euphoria preceded by such various types of manifestation, such as strokes, painful attacks, scarlet fever, pneumonia, or depression following upon creative energy?

'The answer is readily supplied. The object of this whole book is to show that our life does not follow a uniform course but is subject to periodic fluctuations. All internal changes from birth to natural death are exclusively bound up with the periodic days which are initiated by a shorter or longer euphoric phase. Collapse immediately follows upon Euphoria. And when for the last time the male substance in our organism allies itself with the female substance, when the last free units are joined together, even then Nature still deceives us by veiling the approaching horror of the final supreme agony with the Euphoria which precedes death.'

I think I cannot conclude this brief survey of the work of Wilhelm Fliess in a more appropriate way than by quoting the words with which he ends his book:

'Wherever we have examined Life we have found the co-operation of the male and female elements: in the whole course of life; in the remarkable bilateral structure of the human form; in the disturbances which we call illness; in the pleasure accompanying the reproductive act; in the production and renewal of living beings. And all these find-

ings have led us to the concept that in this interaction of the two sexual substances, in generation interpreted in the widest sense, lies the central problem of Biology.'

I believe that the biologic concept of Wilhelm Fliess has set a decided stamp on the whole science of Biology, and I am of the opinion that a thorough knowledge of this theory is indispensable for every biologically-minded physician.

## VI

### TRADITION A FUNDAMENTAL PRINCIPLE OF BIOLOGY—AN ETERNAL LAW

SINCE there is at present so much discussion of a New Order and of the futility of the old-fashioned beliefs and traditions, and since we are so often confronted by the insistent demand that every kind of tradition should be thrown overboard, I consider it vitally important that this whole subject be reviewed and discussed from a biological aspect.

Our whole life, the life of every living being, is based on and rooted in tradition.

Try to suppress the spring, to stop the blooming of the flowers, the blossoming of the trees, to repress the working law of heredity! As long as we are unable to do this we cannot discard tradition, because the flowers, the blossoms, the spring, like heredity itself, are nothing but tradition. Tradition is neither a superstition nor an assumption, but it implies the existence of a biological principle upon which are based all the manifestations of life. Tradition depends upon and signifies a handing on, and the handing on of gifts, of talents, of attributes plays a vitally important part in the life of mankind. Therefore I propose to call attention to the most essential principles of biology and of psychology, in order successfully to deal with this subject.

Three main principles of life unmistakably indicate that tradition must be regarded as a biologic manifestation. They are: the fundamental law of *Biogenesis*, the principle of *Continuity of the Germ Plasm*, and the *Mendelian Law of Inheritance*.

Let us first consider the law of *Biogenesis*, which must be regarded as one of the basic principles of Biology.

It is to Haeckel's special credit to have recognised the impor-

tance of the principle of recapitulation and to have stated it clearly in terms of evolution in the familiar words: *Ontogeny is the Recapitulation of Phylogeny*. This biogenetic law upon which Haeckel laid such great emphasis, explains that the phases of development of the individual are essentially recapitulations of the development of the race; or, in yet simpler terms, that the development of the individual is an epitome of the development of the race. How, then, can we deny tradition if the development of the individual is indeed a recapitulation of the development of the race? This principle is very comprehensively set forth by Louis Agassiz in his great essay on *Classification*,<sup>1</sup> and includes the following words: 'It may be considered as a general fact, very likely to be more fully illustrated as investigators cover wider ground, that the phases of development of all living animals correspond to the order of succession of their extinct representatives in past biologic times.'

I now proceed to the second basic principle of Biology, namely, the concept of the Continuity of the Germ Plasm, discovered by Weisman as early as 1855. According to this law, our living substance, the cell plasm, possesses continuity of existence and upon this continuity are based all the factors of inheritance. In the process of an individual's development a part of the germ plasm contained in the egg cell of the parents is not utilised for the construction of the body of the offspring, being reserved unchanged for the formation of the germ cells of the following generation. This fact is of paramount importance, for it is upon this continuity of the cell plasm that heredity is based, and this continuity is consequently responsible for everything pertaining to evolution. Moreover, it is due to this law that acquired characteristics can be transmitted, and in the light of this principle we are able to understand the transmission of talents and of specific attributes. We are born with our talents, they can never be acquired, but only developed. This fact is very significant, and the biologist must recall that the whole trend of modern research points to the conclusion that after birth we cannot add to the number of our inherited talents. These talents may be specific, of a unfold or manifold nature, or they may be general. We either possess a musical ear or we do not. If we have no ear for music we cannot develop a musical talent. If we have within us no feeling for music, we cannot acquire a musical talent, for no one can attain to anything for which he has no inherent tendency. Evolution implies a

<sup>1</sup> London, 1859.

handing on of life and is conditioned by heredity. This signifies that the parent is the trustee of the germ plasm rather than the producer of the offspring. Thus considered, we realise that we are to be regarded as merely the product of our ancestors, and the living substance within ourselves must be considered as a part of the living substance of our whole generation. Therefore our own existence is dependent upon what we have inherited.

But the manner in which this inheritance contributes its various attributes can only be understood by familiarising ourselves with the third biologic law mentioned above, the Mendelian Law of Heredity. This law explains how and to what extent we are dependent upon our ancestors. We know how unlike the various members of one family very often are,—sometimes to a very surprising degree. They differ in their appearance, in their mentality, in their talents. The enigma as to why and to what extent talents or other attributes become manifested in one or the other of the children, sometimes even skipping a whole generation, is solved by this Mendelian Law. It has been shown by many experiments that the transmission of attributes is regulated in accordance with this biologic law, which explains why certain characteristics are more or less accentuated in certain of the offspring of a later generation. As stated, we inherit all our attributes, even those newly acquired by our parents and ancestors, but not all individual characteristics become manifested. Mendel demonstrated that some of these characteristics will become dominant in the next generation, whilst others will remain latent or dormant. These latent attributes will pass through one or more generations without being developed in the offspring, after which they will suddenly reappear in a later generation. We call these attributes, which are not manifest but disguised, 'masked attributes'. And it is just the interpretation of the masking and subsequent disclosure of individual attributes which is of such importance in all problems of heredity. The distinctions daily noted between several members of a family may relate to quantitative or qualitative characteristics, and are analogous to the phenomenon of some new constitutional or biochemical features. They may be structural or functional, they may be negative or positive. But they all strikingly illustrate the Mendelian law of heredity. (A typical example of this kind is the Hapsburg lip.) This Mendelian law also governs our spiritual gifts and talents. I cite the instance of Mozart's family, in which the musical talent was inherited; also the evidence of families of actors.

Viewed from this biologic standpoint we are compelled to admit that our mind is much less our own than we commonly

suppose, even though we are in the habit of speaking of 'having a mind of one's own'. We must not forget that the transmissibility of all acquired attributes is not restricted to our physical life, but applies equally to our mental and spiritual life. All impressions received during our lifetime will remain stored within us, whether we are aware of the fact or not. As all acquired experience can be transmitted to future generations, we must take into account that many of the experiences of our ancestors are living within us without being recognised as such. Thus a part of our subconscious must be regarded as ancestrally conscious,—a fact of the utmost importance. It is psychoanalytic research which has pointed out these facts. Modern psychology has already contributed most significant evidence of the extent to which the subconscious life within us may be influenced by the transmission of inherited experiences, and we have additional evidence to prove that, from the point of view of psychology as well, tradition must be accepted as an established principle. As stated in a previous chapter, modern psychology recognises the super-ego, the ego and the whole province of the subconscious, which latter plays such an important part in our life. Let me quote again from Freud, the greatest psychologist of our times: 'We see the importance of the part played by the super-ego which represents tradition and the ideals of the past and which resists the pressure exerted by new economic and social situations.' The fact that the super-ego represents tradition cannot be more clearly and significantly stated than in these words. This statement made by Freud fully endorses our opinion that tradition must be regarded as a biologic factor, and that it must never be overlooked or disregarded in any vital consideration of human affairs. For it is a fundamental principle of psychology, which itself is a part of biology. And it is upon this conception of the unity of the organism, both mental and physical, that the Medicine of to-day insists. However, we must realise that mankind never lives completely in the present. The ideologies of the super-ego perpetuate the past, the tradition of the race and of the people, and these yield but slowly to the influence of the present and to new developments.

In the words of Freud: 'Tradition plays an important part in men's lives, irrespective of economic conditions.'

Thus this represents additional evidence that, considered also from the modern psychological aspect, the rôle played by tradition is accepted as an important element in evolution. But evolution is based on the inheritance of all the various experiences due to nature and nurture. As Herbert Spencer so trenchantly stated:

'Either there has been inheritance of acquired characteristics or there has been no evolution.'

If now we have fully comprehended that the whole organism is a unity and conclusively demonstrated that even a part of our subconscious must be regarded as originating from our parents, grandparents and ancestors, another question of equal importance still remains to be answered,—namely, What is the link between our ancestors and ourselves? On what element or principles is inheritance in all its manifestations based? What do we know about the mechanism upon which are based the continuity of the germ plasm and the transmission of attributes?

In order to answer these questions we must familiarise ourselves with yet another most important biologic discovery. I allude to *Cell Memory*. It is through the work of E. Hering that we know to-day that every organic cell possesses its own memory, which we have learned to understand as the *Cell Memory* of the *Organic*, or better, of the *Living Substance*. Through this phenomenon the experiences of life, which we have previously discussed, are maintained and stored within our living substance which, after all, is responsible for what we are. Every experience marks its stamp on our being. From a philosophical angle this fact has been discussed by Bergson in his *Matière et Mémoire* (1896). I regard this discovery of the cell memory as one of the most important factors in Biology, for only hereby have we really achieved a proper understanding of many phenomena, such as the continuity of the cell plasm or the transmission of attributes; in short, of all the various biological occurrences. This fact has given us our profound understanding of all the processes of inheritance, but in particular of tradition itself. How can tradition be denied if every cell has a memory for everything once experienced? Tradition in all its various forms and manifestations is rooted in cell memory. As I will show in another connection, our tolerance or intolerance, which later leads to all the manifold allergic manifestations, is biologically and fundamentally based and dependent upon this cell memory. To the same degree this is also responsible for the fact that our mind, the unconscious within ourselves, has to maintain so many thoughts and experiences of life which are inherited from our ancestors.

Finally, I have to draw attention to a further biologic fact which will both perfect our knowledge of the fundamental principles of biology and contribute the most striking evidence of tradition as a biologic occurrence. I refer to the rhythmic pulse which underlies all living substance and is a basic element throughout the whole course of life.



This law of rhythm shows conclusively that our life is dependent upon and interconnected with the life of our ancestral line, and how far-reaching this principle is. The life of all living organisms, human beings, animals and plants, is governed by the same inner mechanism, by the same rhythm.

This was the reason why I drew attention to the biologic concept of Wilhelm Fliess. Considered from this biologic aspect there is evidence that our life—regarded as the life of one individual—is interlinked with the life of the whole family, that life pulsates in a rhythm, and that our living substance possesses continuity.

All these biologic facts strikingly indicate that tradition is an essential biologic feature of all living beings. Tradition is an eternal law. To protest against or to deny tradition is like denying that our heart beats or that the various organs of our body function in accordance with law. For the manner in which our organism works, the way in which the various organs function, are nothing less than an obvious exemplification of tradition.

## VII

### PERSON AND ENVIRONMENT

**B**EFORE it is possible to consider human affairs from a joint psychologic and biologic angle, it is essential to understand the relationship between the individual and his environment. The manner in which a person reacts to this environment and the mechanism by means of which he becomes embodied in his environment are factors of vital importance. From a biologic point of view the environment must be conceived as the external *milieu*, whilst the whole hormonal system represents the internal *milieu* by which the individual is governed and controlled, and which is responsible for the building up of his personality.

The individual and his environment represent a united bio-system. The individual can live either in harmony or in disharmony with his environmental conditions. It is my purpose to show the mechanism whereby the process of embodiment of the individual in his environment is effected.

All living organisms are subject to a natural law.

In the same way as plant and animal life is largely determined by conditions of climate and soil, the particular characteristics of a race are also influenced by these factors. There exists a difference

between the inhabitants of the mountains and the valleys, between men of the hills and the plains. If we consider the history of the development of the various races on the basis of their dependence upon soil and climate, we can also apply the term 'vegetation' to man.

We are familiar, although at present to only a limited extent, with the geographically conditioned influences of climate and of all the various external conditions on the physical constitution of man. History has shown us, according to Kretschmer, 'that since the beginning of human memory the various races have been confined to special zones: the dark races to the warm south; the yellow race to the icy regions of the north and to the cold steppes of the Asiatic plateaux; the white race to the intermediate zones. And this condition has persisted in the face of the greatest variety of migrations, as has been shown by history. Thus we witness in our own time the development of a new racial type in America, representing what might be designated as a kind of "indianisation" of the Europeans who have settled in that continent. But at the same time it can be shown that not a drop of Indian blood is to be traced in the inheritance of these Americans who are steadily approximating to the Indian type but whose ancestors were Europeans.' All these facts, taken in conjunction, indicate a connection between geographical environment and the hormonal system.

Experimental racial selection has shown that the hybridisation of alien races produces an intermediate type which is hereditary. Reitmayer's experiments in racial biology have shown that the admixture of alien blood can produce a *fermentative* effect and also emphasise specific racial qualities.

According to Johannsen, the most distinguished investigator in Heredity, so-called *pure types are never found in the human race*. It has been shown that there exists a definite congruency between superior cultural achievement, mental creativeness and zones of geographical racial intermingling. Cultural dominance is most pronounced wherever racial admixture has assumed marked proportions, and Kretschmer has shown that the cultural regions have coincided with the zones of racial intermingling. Sommer attributed the marked predominance in the Florence of the Renaissance of men of genius to the fact that a considerable number of individuals from the German nobility had settled in that city, where they had mingled with the artistic members of the middle classes. The crossing of several dissimilar trends of endowment represents an important factor in the production of genius. We are familiar with analogous conditions in the realm of plant and

animal biology where this phenomenon is known as the 'luxuriant of the hybrids'. The hybrid is larger and stronger than either of the parent races, and wherever the problem of genius is considered from a biological point of view we are confronted by similar phenomena of hybridisation. For genius will always be found wherever the individual is compelled to struggle against an established environment. No genius without conflict!

Observations made on plants and animals have shown to how marked an extent peculiarities in the mode of life and appearance undergo change when the environmental factors are arbitrarily influenced in a definite direction. In the same way, for example, as in the organic world, starting from one single crystal there can be induced a progressive change of state within the environment, so also can any part of the organism effect a conversion of other parts.

Next in order to climate, *nutrition* figures as a determining external factor in its influence on human development. For in man particularly the power of adaptation to various conditions of nutrition plays a vital and significant rôle.<sup>1</sup> This marked capacity presupposes an extensive power of adaptability to new and foreign external factors. Furthermore, biological laws are generally applicable in establishing the individual in his environment. Thus we know, for instance, that the nourishment of the larva is the factor which determines whether the fertilised egg of the bee will develop into a worker or a queen. This phenomenon is indicative of the several tendencies latent in every germ and shows to what extent the various environmental influences can affect individual trends, whether by increasing, inhibiting, or changing them. One often hears of 'mutation' in biology, by which term we understand the various changes which proceed in the organism of an individual, often by leaps. Thus in the case of Alpine plants it has been observed that suddenly altered living conditions have produced definite phenomena, the tendency to which had remained dormant for many centuries. The great biologist De Vries attributes this type of phenomena to degressive mutation, and he cites them as instances of spontaneous atavism, representing the reactivation of latent tendencies. Atavism is the regression to lost, forgotten states of existence in the cycle of development.

All these biological facts are of the greatest significance for an appreciation of similar phenomena in the field of Ethnology. They account for certain manifestations in our cultural life which are

<sup>1</sup> I will enlarge upon this question in another chapter.

attributable to similar cases of atavism. Here, too, we note instances of regressive mutation which permit us to infer the existence of latent tendencies. These include regression to former phases of development, for even a high stage of culture is not suddenly attained but represents a steady evolution from the primary, via the elementary phase, to the highest form of cultural development.

How can we explain the phenomena of retrogression, these forms of mutation? All these questions find their answer in the law of heredity.

When in 1865 Gregorius Mendel undertook the hybridisation of closely related types he discovered a fundamental principle. His law of heredity has established the foundation for the new science of Heredity, and has become the basis of modern Constitutional Medicine. According to this theory, in the course of heredity a separation occurs of two different elements of the parent organism, so-called intermediary characteristics. These are qualities which are united in the different specific natures of the parents and this process of separation is designated 'intermediary heredity'. Usually, however, certain of these characteristics are particularly dominant, whilst others are repressed; they are, respectively, the dominant and the regressive or latent characteristics. Now it happens that in the first generation the latent qualities are not always externally visible but only make their appearance in a later generation. Thus the difference between the intermediary stage of heredity and that showing dominant characteristics lies in the fact that in the former the various parental characteristics are externally apparent, whereas in the latter the hybrids possess the external characteristics of only one of the parents, *i.e.* the dominant one, whilst the actually existing other characteristics are retained in a latent form. These latter only become visible in subsequent generations. Hence in the later generations certain characteristics often appear in alternation, and these are transmitted sometimes in a dominant, at other times in a regressive form. Their separation is effected in accordance with definite laws of almost mathematical precision. Since the time of Lamarck we know that the changes occurring in the organism of a parent may be transmitted and may in later generations lead to changes of a more highly specialised nature. Living substance possesses definite tendencies. These tendencies are inherent in the germ plasma, and after remaining inactive for a number of generations they can become reactivated. This reactivation can be stimulated by various environmental influences, for every cellular change is

essentially the expression of a general *changed condition*, and presupposes the existence of oscillations in the mechanism and chemical processes of the cellular structure. The law of heredity, viewed from a chemical aspect, as represented by the most advanced scientists, such as Herbst, Baur and Hartmann, is based exclusively on the results obtained from investigations in connection with protein chemistry. It is only through our improved knowledge of colloid chemistry, involving an understanding of the proteins, that we have been able to acquire a scientific comprehension of all these phenomena of heredity which experimentation has revealed to us. And in this connection it should be stated that it is the conditions governing the electrical charge of the colloids which have supplied the explanation of these phenomena.

Every stimulus effects a change in the state of the protein colloids, which in turn leads to a determinable chemical change within the organic substance. The memory of organic matter is attributable to this changeability of the colloidal state of living substance. According to Hering, every cell, through the operation of cell memory, is able to store its experiences, and this phenomenon of 'cell experience' furnishes the basis for our assumption of the heritability of acquired characteristics, as formulated by Lamarck. The various remembered impressions of experiences appear in the form of engrammes and engramme complexes and are passed on as engrammes to our inherited germ plasma. Thus we incorporate the images of remembrance of our own particular ancestral line, and the expressions 'inherited consciousness' and 'ancestral consciousness' are therefore seen to possess an underlying significance. This ancestral consciousness exists in us subconsciously in the form of pre-consciousness. Herein is rooted a part of what we carry over as tradition, which Goethe recognised when he said, 'Was Du ererbt von Deinen Vätern erwirb es, um es zu besitzen'.<sup>1</sup> Ancestral consciousness is the source, not only of all superlative cultural achievements, but also of all cultural lapses. It is linked up with the subconscious, with those recollected images which we have taken over from the past in our living substance, which live on in ourselves and represent a part of our personal destiny. It represents the element of predetermination in our being and operates, not only in the individual, but also in the collectivity and in every race. Society also possesses its cell memory, its subconscious, its remembered pictures, its experiences.

<sup>1</sup> What you have inherited from your fathers, win for yourself in order that it may be your own.

These permanent remembered pictures live on in each one of us, either consciously or subconsciously, and are associated and bound together in engramme complexes. All reproduction is based on these engrammes. The subconscious experience of atavistic memories, the emotional life of whole generations persist in cell consciousness.

These facts may suffice to indicate to how far-reaching an extent newly acquired environmental elements may be transmitted; they also point to the laws governing the transmission to future generations of these newly acquired characteristics. The latter are transmitted to our children and thus become factors of determinant influence in the life and destiny of future generations.

Elsewhere I have drawn attention to the significance of the environmental factors by showing the conditions under which they may be newly acquired by the individual. In doing so I have recognised that the reactions of the individual to his environment are based primarily on the changeability of living substance. The lability of the germ plasma involves the possibility of variation and multiplicity, for the reason that it may possess a variety of tendencies. But the factors of character and temperament are only in part internally predetermined, for these factors only operate in the individual as the result of the influence of environment. All retrogressive phenomena are based on the latent, pluripotent disposition of an organism. The existence of the element of lability in the germ plasma permits the assumption that man possesses an extensive power of adapting himself to the changing conditions of life.

## VIII

### THE MECHANISM OF ADAPTATION BY ACCOMMODATION AND INCORPORATION<sup>1</sup>

THE preceding considerations lead me to a discussion of the significance of the environmental factors in the development of the individual personality. Montesquieu already said: 'Men are the creatures of their environment, and even in the forms of their associated life, in the development of their states and in their legislation they are dependent upon their surroundings.'

These words indicate the rise of the biological point of view.

<sup>1</sup> The mechanism of adaptation is twofold, *Anpassung* and *Einpassung*.

Although unfortunately the decisions of statesmen who guide the destinies of nations are much too little influenced by biological trends of thought, this viewpoint should always receive prominence in the consideration of problems of fundamental and decisive importance.

Man and his environment should be conceived as a bio-system which is maintained in a constant state of equilibrium and is subject to change and regulation by the operation of a dual mechanism, from within and without, of the human organism and the environment, respectively.

A general capacity on the part of the individual to adapt himself to environmental conditions is one of the most significant factors connected with the building up of his personality. Nature displays similar phenomena in the form of Mimicry, under which term is understood a widespread power on the part of the individual to identify itself with the factors of its environment. In animals and plants this involves changes which produce resemblance to the environmental forms. This process is to be interpreted as a form of protection which by making an individual resemble its environment renders it invisible. It involves the creation of protective colours, forms and bodily attitudes.

This capacity of adaptation can be observed throughout nature. In man it takes the form of adaptation to the specific environmental factors. Adaptation is merely the transference of the organic system in the individual from one state of equilibrium to another. Thus we can only be said to be harmoniously adapted to our environment if our functional processes have become united and co-ordinated with the environmental factors to form an indissoluble regulated system,—an entity. And not until the individual has become adjusted to his environment to a degree of identification will the world around him become the world of his own expansion. Should, however, this link in a united system be missing, the individual will lapse from his environment, for he will have failed to find his needed sphere of expansion. Such disharmony leads to illness, for since all life is determined by the principle of energy, it follows that the ergic factor underlying the vital processes will be affected by a lack of space for expansion. Moreover, the organism is sensitised by this 'negative' environmental factor, and this condition in turn leads to intolerance of the individual toward the factors of his environment. *The phenomenon of a persistent sensitisation of the individual as a result of environmental conditions accounts for the manifold reactions in social life which frequently exercise a powerful influence upon cultural developments.*

I am of the opinion that we should correct our conceptions regarding our power of adaptation. The mechanism of adaptation does not function in a uniform manner. It is based on a twofold mechanism, on Accommodation and Incorporation. I wish to distinguish between voluntary adaptation, or 'Accommodation', and instinctive adaptation, to be designated 'Incorporation'.

Thus the adaptation of the human being to his environment is effected by these two distinct processes: accommodation and incorporation. Embodiment in our environment is the result of the operation of these two factors.

Accommodation is effected with the help of the sense organs of the central nervous system. It results from the action of the cortical self. Incorporation, on the other hand, is based on a subconscious process proceeding from instinct and intuition. We attain to this condition through the vegetative or instinctive self.

It is only through the joint co-operation of these two forms of adaptation that the individual attains functional unity with his environment, thus becoming a co-ordinated entity. Accommodation leads to civilisation, incorporation leads to culture.

Every cultural accomplishment is associated with hyper-sensitivity. It has been stated elsewhere<sup>1</sup> that perception as a function of consciousness corresponds to emotion in the realm of the subconscious. The more an individual becomes sensitised to the influences of his consciousness through his subconscious, or vegetative current,—that is, through his instinctive self,—the more potent becomes his world of emotion and the greater his hyper-sensitivity. His consciousness becomes allergised.

Anergy, or hypo-sensitivity, is interlinked with civilisation; allergy, or hyper-sensitivity, with culture. The greater a person's hyper-sensitivity, the more will he be subject to intuition and therefore to incorporation. The more anergic an individual, the greater will be his power of accommodation and his faculty to absorb foreign elements. Accommodation leads to adjustment to the environment, incorporation leads to assimilation with the environment. The individual as an entity represents the integration of the processes of accommodation and incorporation. Civilisation should be understood as the product of adjustment by way of accommodation; whilst culture is based on assimilation by way of incorporation. Civilisation is associated with consciousness; it is governed by reason. It represents the reaction between the cortical self and the external world, the *milieu extérieur*. Culture, on the

<sup>1</sup> E. Pulay, *Allergic Man*.



other hand, is bound up with the vegetative stream, with the instinctive self. Culture is controlled by feeling and is not subject to reason. It is the product of intuition; it is dependent upon the inner depths of our being. It is the expression of the harmony existing between our internal *milieu* and the external world. The more highly developed the instinctive self and the greater the number of impressions and experiences proceeding from the vegetative stream to the consciousness, the more will an individual's attention become concentrated on his inner hearing, on the signals from within. Culture is introspective, civilisation is extrospective. Culture flows outwards from within, civilisation, guided by reason, flows inwards from without. It penetrates from the external environment to the consciousness. Allergy refuses, anergy accepts. Culture possesses the power of rejection, whilst civilisation is based on the faculty of receiving and accepting. Incorporation in the environment is a function, accommodation to the environment is a regulatory process. The more instinctively adaptable an individual is, the more harmonious will his personality be and the more functionally united will he be with his environment. He has assimilated the soil, climate, landscape, and all the chemical elements of his environment, and at the same time he has incorporated and absorbed them in the work of building up his personality.

Civilisation is directed toward society, for the reason that it tends outwards and therefore represents a collective principle. Culture is directed toward the individual, because it radiates from the individual. Culture represents the apex of intuitional adaptation to, or incorporation in, the environment. For the culture of the individual, of the collectivity, of a time, of an epoch, is the creation of the subconscious within us, of the urge of the instinctive person.

Now the vegetative processes are controlled by the sex hormones and operate in the realm of the instinctive self. It is well known that the constructive processes are controlled by the female sex hormones, the disintegrating processes by the male hormones. More broadly considered, this would indicate that the female substance tends rather toward synthesis, the male substance toward analysis. Consequently the feminine man is characterised by increased emotional power, whilst the masculinised woman is conspicuous by her power of abstract analytical thinking. Inherently the woman has more intuition and instinct than the man, as a result of which she possesses greater power of incorporation in the conditions of her environment. The man, on the other hand,

as the bearer of civilisation, is distinguished by a more extensive power of accommodation. Now, as we have seen that culture is based primarily on incorporation and civilisation on accommodation, it follows that all cultural accomplishments will be more closely associated with the female substance within us, while our aims at civilisation will be more especially related to the male elements in our composition.

All biological facts corroborate such an interpretation and indicate the predominance of the female substance in the work of creation. And as culture represents construction, synthesis, coordination, whilst in civilisation receptiveness, as contrasted with assimilability, plays a preponderant rôle, I feel justified in assuming that the female substance represents the factors which prepare the basis for culture, and the male substance those which promote civilisation.

In this connection it appears of particular interest to note that during the transition in human evolution from the hunter to the agrarian epoch the position of women in cultural life underwent a fundamental change, a change most conspicuously manifested in art. Friedrich Behn writes in his *History of the World*, in connection with the prehistoric and primitive historic periods: 'Art, at this time also a product of culture, changed sex and became feminine. But the essence of feminine art is synthesis, the creation of a whole out of its small and minutest units. It assumes the form of manual work, rather than of monumental art.' Thus we see that this historian also designates feminine art as a synthetic process, thereby furnishing an additional indication of the relation of the female substance to the constructive, synthesising processes.

As it should be the aim of all thought to determine causes, not only effects, we are compelled to assume the existence of an underlying cause and purpose in connection with all the phenomena of Nature. The question that confronts us is: What is the significance of all our aims at civilisation?

This question suggests an obvious chemical analogy: Civilisation resembles a process of adsorption, culture one of resorption.

This analogy appears additionally significant in connection with our particular problem. The embodiment of the individual in his environment depends upon certain reactions which in their turn are based upon varying degrees of sensitiveness, as shown by different persons in accordance with their ergic capacity.

In the building up of culture the assimilatory processes play a distinctive rôle, that of transmitting culture. This involves dynamic processes, the operation of which is dependent upon the

intervention of catalysers; for no dynamism can function in the absence of the catalysing principle.

I wish therefore to recognise in the work of building up a culture two contrasting agents: the culture bearer and the culture transmitter. The task of the latter is to convey a culture under varying conditions of environment. His action resembles that of a catalyser in that he guides these processes along lines of kinetic reaction, the results of which are subsequently handed down and explained to us by history. When so handed down we are informed about events and phenomena, but never about processes. We learn nothing about the play of forces underlying these events. But the latter must also be subject to the same universal laws which control all the phenomena of life.

Historians are too apt to forget that history invariably proceeds from human beings, and that its concern is therefore with the destinies of men and with the events associated with living beings. It is of such events that we learn through the history of culture. We learn about individuals who, by virtue of their character, their temperament, their talents, their capacities and their ideas are able to take an active part in the shaping of history. Thus we are always concerned with personalities who, even if richly endowed, are bound by the same laws which have been found operative in all human accomplishments. But in view of the fact that the vegetative aspects of life are influenced by the hormones, it follows that wherever problems concerning culture and civilisation are concerned a position of prime importance is assumed by the vegetative current of the individual, including the controlling hormones.

## IX

### CULTURE AND CIVILISATION

**I**s there a difference between Culture and Civilisation, biologically considered? How shall we envisage all the processes which lead to the embodiment of man in an environment under given conditions? What governs accommodation, as defined above, to the external environment, and when and under what conditions is incorporation in an external *milieu* effected? It is essential that we view these phenomena as vital processes.

Accommodation depends upon the acceptance of foreign characteristics, habits, customs, methods of nourishment. These new factors are combined with the elements of our personality in

the sense of an addition. They are accepted by it and brought into association with the cortical self. For it must be borne in mind that it is always the cortical self that effects all contact with the external world, and that the assimilation and building up of newly acquired material is a very gradual process. This building up may lead to fusion with the inner world of the intuitive self. However, these new acquisitions may also be rejected by the intuitive self and thus remain unutilised. If such is the case they are retained in the consciousness of the cortical self and so do not penetrate into the vegetative stream. They are converted into memory images of the cortical self; they are never taken up into the cell memory of the vegetative self and hence are not transmitted.

One of the most significant characteristics connected with cultural phenomena is based upon heritability. Culture can be and is inherited; civilisation is always acquired and learnt. Incorporation and accommodation are two fundamentally different processes and the difference is one of mechanism. Incorporation involves a reactionary process between the contents of the personality and the contents of the environment, respectively. It is not a question of the simple acceptance of new environmental conditions, alien to the organism, but of the annexation of values new in content. Everything associated with the concept of culture has an emotional bias, and the very idea of emotion presupposes feeling. The instinctive self is brought into contact with the factors of environment and cultural values are taken up by being transferred to the region of personal consciousness, that is to say, to the subconscious of our being, the instinctive self. Thus incorporation in the environment is not effected through the addition of new acquisitions, but through the absorption of new realisations. These fuse with the factors of the instinctive personality, for the new environmental elements only become part of the experience of our instinctive self when they are taken up by that self and retained in the form of experience. But for this to take place they must be reshaped and reimpresed in a form acceptable to the intuitive self, after which they must be additionally worked up into the consciousness of the personality. Culture is assimilated, civilisation is accepted. Culture is profound, civilisation is superficial. We therefore observe that the mechanism which guides cultural processes is fundamentally different from that which controls the manifestations of civilisation, for the essential difference between culture and civilisation lies in the contrast between experience that has been emotionally felt and knowledge which has been mentally apprehended.

In the same way the culture bearers and culture mediators can be contrasted. The culture bearer is not only the guardian, but the co-fashioner of cultural values. The culture mediator, on the other hand, fulfils his task by transferring the cultural values to other centres of culture, remaining himself merely the guardian of cultural achievements. This transference depends upon and results from a highly developed readiness to accept assimilation.

In order that a person may transfer something, that is, take over a value, extend it and deliver it at another point, he must above all refrain from taking control of this possession or of assimilating it to his own ego, of fusing it with his instinctive self, or of permitting it to become an essential part of his personality. For if once he has assimilated this possession as an entity it becomes a very difficult matter to render it up unchanged. Thus the culture mediator might be compared to a transportation company whose duty it is to collect even the most costly possessions, to store them and subsequently to deliver them intact to the required destination.

What, then, are the centres from which culture is taken up? For a better comprehension of this question we will again revert to the organic processes and recall the so-called human organs of storage whose task it is to collect and deposit substances and thereby to store up reserves against times of danger. We must also assume the existence of such depository centres for the reception of cultural values. These serve to establish and stabilise culture, and they function as apparatuses of reception and centres of cultural achievement. The human organism possesses many such organs of reception which are represented above all by the organs of sense; for it is by means of the senses that we perceive the occurrences in the world around us. To these must be added the realm of emotion and feeling and all that is understood by the word 'soul'. The element of soul within us, the psyche, is primarily the organ of reception for mental and cultural messages. Its regulation is connected with the co-ordination of the instinctive and the cortical selves and with our attitude towards the external world. For it is our adjustment to the spiritual world, our mentality (to use this hackneyed word in a comprehensive sense), that determines the manner in which the individual is capable of reacting to cultural conquests and achievements. This adjustment of our person determines our mental and spiritual attitude; it appears as the factor which tests human values and is reflected in our reactions and actions through which it is rendered comprehensible. There is a considerable difference between the connotation of 'acceptance' and 'assimilation'. 'Acceptance' implies an addition, an associa-

tion, a linking. 'Assimilation', on the other hand, denotes penetration, fusion, embodiment. But assimilation can only take place where there exists capacity for assimilation, and that is found in the intuitive self, in the centre of emotion. Here therefore it is that the new values become converted into an integral part of the consciousness of the intuitive self.

Culture is mediated by the cortical self, but it is assimilated by the intuitive self.

The cortical self resembles the transporter, and through its instrumentality the experiences of the intuitive self are transferred. Civilisation is merely the route by which this transference is accomplished. Civilisation fulfils its task through the negotiation and transfer of cultural values to the most diverse regions. In the building up and conversion of cultures it plays the rôle of a catalyser. For cultural achievements are energetic in nature and possess their own dynamics and hence their own laws as well. Their existence presupposes the annexation of the individual personality by his environment. Wundt emphatically states that 'the components of organic regulation can all be traced back to catalytic processes, which in their turn are the effect of general forces of chemical affinity operating under special conditions'. And Willstaetter characterises life as 'the co-operation of enzymatic (catalytic) processes'.

Thus all cultural achievements are also seen to be under catalytic control. The processes of assimilation guide civilisation. Civilisation is the great world catalyser responsible for the creation and decline of cultures. For, like all energetic processes, cultural achievements need fermentative guidance. And all world events are also seen to be dependent upon the intervention of catalysers. In the history of mankind catalysis plays a much more important rôle than is commonly supposed, for it determines the reactive manifestations of society.

## X

### CULTURE MEDIATORS AND CULTURE BEARERS

**T**HE form and method of embodiment in a given environment are significant, not only for the destiny of the single individual, but also for that of the social organism as a whole. The embodiment of the social organism corresponds to that of the individual who has become a part of the collectivity. Society

accepts the individual as a digital; it is dependent upon the constant factors of the external world. But the social organism is not essentially a product, but a summation of single individuals. Hence the mass reactions are largely to be interpreted as reactions of various digitals, each one of which is a product of the external world. The social organism must also attain functional unity with its environment in order to achieve harmonious equilibrium with it.

The dynamic occurrences of society are dominated by the same play of forces which we have learnt to recognise as operative in the structural building up of the individual personality. The social organism also possesses its soul, its conscious and its subconscious. In the case of society likewise we must accept the existence of a 'vegetative stream' as representing the instinctive self and the seat of the subconscious, and we must accept its counterpart in the cortical or controlling self, viz. the seat of the conscious perceptions. The culture of a society and of a race are also based on the dependence of the instinctive self upon its environment, in the sense of incorporation. The more incorporated in his environment the individual person is, and beyond him the social complex, the profounder will be the culture of the individual and of the race. This fact enables us to understand the far-reaching connection which exists between the factors which promote culture and the emotional link which binds the individual to his native world. His particular mother earth becomes his own home. A nation or a people that is not or never has been intimately rooted to its native soil can never become a bearer, but only a mediator of culture. (This is exemplified by the Jewish race.) By virtue of its assimilatory powers it is able to lay hold of cultural values; it may even assimilate and store these values. But it will never primarily be the bearer of this culture. The culture bearer, on the other hand, is associated with his native land as a functional entity. The more such a person has become incorporated as a unit in his environment, the more profound will his culture be, because his personality is more intuitive. But the culture mediator may sooner or later also become a culture bearer, if in the course of successive generations he passes from the stage of accommodation to that of incorporation in his environment. This conversion of a culture mediator into a culture bearer is based on the power of transmitting the factors of experience. It depends upon the broad capacity of attaining incorporation by way of accommodation.

The biological basis of this phenomenon, viz. the extent to which a culture mediator can be converted into a culture bearer, can be demonstrated by a few scientific illustrations.

Bourdage observed the changes which the European peach tree underwent upon transplantation to Réunion. The European peach tree adapted itself to the climatic conditions of that island and failed to shed its leaves at the customary time. Its successors remained evergreen from the beginning and retained this newly acquired characteristic when they were subsequently cultivated in more elevated zones of the temperate climate. Similar phenomena were noted in Pictêt's investigations on caterpillars. As a result of extensive feeding and the application of heat, these caterpillars abandoned their stage of hibernation. It was next noted that the succeeding generations of caterpillars, if kept under normal conditions, similarly failed to undergo hibernation. They had permanently lost this capacity.

These two examples may serve to prove the transmission of positively acquired attributes, as the result of changes in the parental germ cell. In this connection mention should also be made of the interesting observations of Kretschmer, who showed that a race which during an undeterminate period of time had inhabited the same coastal region and was fair, tall and long-skulled, when transferred to a mountainous climate became converted into a short-skulled type. Similar trends have been described as having been noted in America. In other words, later generations showed that they had already become incorporated in their environment.

All these illustrations show in a uniform manner that traits newly acquired by the parental organism can be transmitted; that, in other words, accommodation can lead to incorporation. And they further serve to illustrate the point in which we are primarily interested, namely, the extent to which the culture mediator can, after several generations, be converted into a culture bearer by way of incorporation.

## XI

### THE MUSAL MAN

**P**ERCEPTION is associated with the cortical self; that is to say, only the conscious self is able to perceive. But emotion is a quality of the subconscious, vegetative self. The broader the flow of the vegetative stream, the fuller and richer the intuitive self, the deeper will be the capacity to feel, and the stronger and



more colourful will be the emotions. This is the domain of intuition, here is rooted the great difference between individuals; this is the chasm, the unbridgable gulf which separates the musal from the amusal personality, with all the varieties conditioned by their different forms of reaction. This difference is manifested in every direction. To give an illustration: Music is associated with the faculty of hearing, with the transmission of sounds by way of the sensory apparatus and the acoustical perception. But what a difference there is in the capacity of hearing, for the vital point is what it is with which we hear. The amusal individual hears with his cortical self, with his consciousness; the musal person, on the other hand, hears with his intuitional self; he absorbs the music and reacts with the musical sounds proceeding from his subconscious. In other words, the cortically controlled individual hears music with his ear only; it is received by the brain and is therefore perceived. But the musal person vibrates in harmony, his whole emotional nature is affected. The emotions are stirred and his personal rhythmic flow is released. *'Gefühl ist alles.'* With what, then, does the musal individual hear? Not alone with his brain, but with his whole instinctive self, with his inner wealth of feeling, with the faculty which we designate as fantasy. Fantasy, that supreme gift of God! Fantasy represents the 'consciousness' of the instinctive self, in the same way as thinking represents that of the cortical self. Fantasy proceeds from the heterosexual element of the subconscious, from the vegetative stream. Upon transference from the intuitive to the cortical self a part of the subconscious undergoes transformation and becomes converted into an element of the conscious ego. But fantasy originates from that part of the subconscious which remains eternally veiled and concealed from the ego. Fantasy is the dream of man during the wakeful state. As the language of the subconscious is symbolic and as during sleep the subconscious expresses itself in the form of dreams, so fantasy also serves as the expression of daydreams. This is the exclusive source of all the creative work of the artist, the fount of all our responsive pulsations, of everything that renders bearable this hard earthly existence. But this same fantasy is also the source of all those errors and confusions which can be interpreted as lying beyond the bounds of normal emotion and control. This is the state of 'emotional confusion'. Thus it is not only the genius who draws from his imagination. His creation merely represents a spinning out, a transference into the realm of the conscious of his dreams and instinctive desires, urges and longings. But insanity is also served by the same source. The insane enlarge the dreams of

their imagination and permit them to take shape. The only essential difference between the creative artist and the person suffering from delusions lies in the fact that the former retains his faculty of realising facts, whereas the latter has forfeited this power. Madness leads to the identification of the dream world with the ego; the dream world becomes reality; a fusion of the vegetative self with the cortical self takes place. The superimposition of the vegetative self on to the cortical self results in insanity.

## XII

### THE COLLECTIVE SOUL

HAVING discussed the manner in which the individual is controlled by his subconscious mechanism and the mode in which he reacts to his environment, I now propose to apply these considerations to mass phenomena. As I have shown the extent to which the individual soul is dependent upon various factors, I will now attempt to demonstrate the mechanism and reactions of the collective soul.

It is impossible to deal with all the various intricate problems with which we are constantly confronted, particularly in our dealings with the problems of reconstruction, without a sound understanding of mass psychology. All the errors and confusion which have led to the catastrophe of our time have resulted from a misunderstanding and misapplication of the laws whereby the collective soul can be influenced.

All organic life is governed by the biogenetic law. According to this fundamental law, formulated by Haeckel, the individual passes through and repeats all the stages in the evolution of his race. In other words, ontogenesis is a short recapitulation of phylogenesis, that is to say, the development of the individual is an epitome of the development of the race.

Every form of culture, which is bound up with living substance, is in its development subject to this same biogenetic law. Nevertheless, it is a remarkable fact that this law has not yet been applied to problems associated with sociology and the history of culture. For the culture of a period, of an epoch, also represents a short repetition of its racial evolution; in other words, it recapitulates all the cultural phases of the past. For this reason every culture shows evidences of former cultural phases, and this explains

the frequent phenomenon of a culture being arrested at a former stage of development. It also explains the many cases of atavism which permit the reawakening of various lower stages in cultural evolution. Thus, in the same way as an organism may be arrested in its development or may relapse to a previous form, so also may culture relapse to lower stages of development. Therefore in the case of culture we must also learn to distinguish between transgressive mutation and regressive variability in the biologic sense.

How else would it be possible to appreciate certain occurrences with which we are only too familiar at the present time? Was the barbarism of Hitlerism the product of new acquisitions or was it not rather the result of such a form of atavism? Do these phenomena not arise from the cell memory of former epochs? Are we not here concerned with cases of biologically explainable relapse, with retrogression to lower cultural levels? Can we not comprehend with increased penetration and clarity of vision the succession of events before us, the recapitulation of historic occurrences with which we are now confronted? Are we not able daily to realise on what broad lines history repeats itself? How otherwise could we explain the far-reaching analogies in historic events and in the life of nations as seen in their numerous reactions to each other and to the events of the past?

All these phenomena can be explained by the history of racial and social development, by evolution. Memory images retain their engrammatic hold. Society and, through society, world events have a memory of their own, and one which is identical with the memory of organic matter and of living substance. For world events also are merely occurrences whose field of activity is the living organism. And having now reached this point we are confronted by the additional question as to what may be the nature of the catalysers which operate in a historical sense to influence world phenomena.

The question whether it is personalities or ideas which are the determining factors in the life of a period receives to-day the unanimous answer that it is to personalities alone that a period is indebted for its ideas. Are we therefore to understand that personalities play the part of catalysers in all the social phenomena associated with a given epoch? As in living protoplasm, so also in the world plasma we can observe an active interchange between the processes of building up or assimilation and those of decomposition or dissimulation.

As all living phenomena are dependent upon these two factors

of assimilation and dissimilation, we are also compelled to assume the operation of organic ferments in the occurrences of world events. By the term 'ferment' we understand that chemical principle which itself remains unchanged while through its operation great quantities of other substances are decomposed or built up. The process influenced by the ferments merely represents a change in the rapidity of the reactions, for the ferments are catalysers which intervene in these reactions, accelerating or retarding their course, as the case may be. But catalysers are never able to initiate such a process unless it has already been prepared. As stated, ferments are never the cause of reactions, they merely induce a different rate of activity in actually existing or potential processes. In world events this catalytic function is carried out in its noblest form by the 'hero' or the 'saint'. Both fulfil their mission to society.

In the abstract such an 'authoritarian person' becomes converted into an 'authoritarian idea'. Authoritarianism is always exclusively related to a dynamic factor, and hence every ferment, acting as a catalyser, is also authoritarian in its effects. Similarly, the authoritarian idea is only a catalyser in so far as it is capable of mobilising predispositions to reaction and of exerting a kinetic reactionary influence on them.

But when and at what stage do these guides appear who, as indicated by the word itself, intervene in world events to guide and frequently to decide them in a kinetic sense? It must be recalled that even ferments merely 'guide' processes.

This question can best be answered in a biological sense. And this leads us to a further question, namely: When and why does society demand authority and which section of the collective soul is it that needs the hero and which the saint?

It is important that we do not interpret the term 'collective soul' as merely representing the sum total of all the associated individual psyches. The substance of this mass psyche is different in nature. Structurally it differs from the individual psyche in that it possesses no individual factors. Within the collectivity the individual loses his specifically personal self, as a result of which the determining factor ceases to be the will of the single individual. The will of the collectivity represents the integration of the instinctive selves of all the individuals concerned.

Thus the collective psyche must not be interpreted as the totality of individual souls which have become fused in an entity, but should be conceived as a structurally new community soul. We are concerned with the building up of the mass vegetative self,

which can better be designated as the 'vegetative system'. And in the same way the cortical self of the individual will be contrasted by the mass 'cortical system'.

We see therefore that the collective soul possesses a different form of subconscious from the single individual, for the reason that its intuitive system is differently built up from that of the individual. The social organism is also bipolar in all its reactionary manifestations. All its impulses, desires and emotions are bound up with its vegetative stream, and from these desires and impulses proceed the subconscious discharges of emotion.

In view of the fact that all the vegetative elements in the collectivity, as in the individual, are controlled by electric forces, it follows that the mass vegetative system will also be capable of electric discharge. The potential tensions endow the social body with its power of impact, with its emotionalism and with its spontaneity of reaction. They are based on the dedifferentiation of the potentials. By means of this dedifferentiation of the potentials latent energy is converted into its kinetic form. In this way the various potencies of the separate individuals come to react on each other in mass association. Consequent upon these greater charges, a state of increased tension is created in the mass turgor, leading to an accumulation of emotional tension and overloading of the vegetative system. An uninterrupted flow of impressions is conveyed to the vegetative system from the outer world, and these are either neglected, rejected or absorbed by the elements of the vegetative system, by which they are then assimilated.

How are we to interpret this act of reception on the part of the mass vegetative system? Exactly as we interpret reception by the vegetative self of the individual. I propose to give a little more attention to this matter, as it is of great significance for the correct understanding of many problems.

Reception by the vegetative self corresponds to the process of digestion. Only such elements proceeding from the external environment which are digested by the vegetative self are also assimilated by it. They become converted into nutritive elements of the vegetative self. This part of the instinctive self also confers upon them the quality of immunity and protection against external phenomena. Accordingly everything which is not digested by the vegetative self, which is not accepted and deposited because it is not tolerated, becomes a sensitiser of the vegetative self. This undigestible precipitate which accumulates in the vegetative or subconscious self renders the mass vegetative system hypersensitive and furnishes the basis for allergic reactions.

Now what happens to those substances which remain undigested and non-incorporated in the individual organism? This question has already been answered at length, and we have shown to what extent sediment formation is able to sensitise the tissues and thus cause intolerance. The non-digested substances which cannot be utilised for the building up of the cells cause either *intoxication* or *hyper-sensitivity*. Parallel conditions obtaining in the social organism are based on an identical mechanism.

Thus in the case of mass reactive occurrences we must also distinguish between phenomena of *intolerance* and phenomena of *intoxication*. One part of the intuitive self is able to digest and absorb external influences. This phase of adaptability to the environment produces the *power of resistance*, both in the individual, and in the collective organism, and this power of resistance may vary in intensity. The reaction between the social organism and its environment may also lead to either intoxication or intolerance.

It was stated that intolerance was based upon the constitutional characteristics of an individual, whilst intoxication results exclusively from the operation of poison, varying in its effects in accordance with the nature and intensity of the poison.

But there also exists an intolerance of the collective body, and this leads to the intolerance of the masses. In the same way as the single individual, each organ and each individual cell can become sensitised, so also the cellular state, the entire organism, the collectivity and the social organism are sensitised and rendered intolerant. Like the individual, the social organism is also composed of tissues, and we must bear in mind that society, like the individual, is similarly characterised by a highly specific condition of turgor. The tissue of the mass turgor, like that of the individual, is *ergic*. The *ergies* proceed from the vegetative stream, the instinctive self. Hence the reactivity of the social organism will also be either increased or depressed. In the former case *hyper-sensitivity* results, in the latter, *hypo-sensitivity*.

Reactions of *hyper-sensitivity* are dependent upon the substance liberated, irrespective of the quantity. The nature of the substance alone counts. For we have found that the remarkable fact connected with intolerance is that the causes leading to fulminant reactions may be very slight and insignificant. The intensity of the reactions can never be predicted. As has been stated in detail in my book *Allergic Man*, the effects of these reactions appear suddenly and unexpectedly. Similarly the mass reactions may also occur with startling rapidity and may lead to dire and unpredictable consequences. These reactions represent discharges of emo-

tion and mass explosions which are very varied in their forms of expression. Among these phenomena of mass intolerance are included revolutions, which are charged with emotion. They proceed from the mass vegetative stream and are invariably directed against the cortical or conscious system, that is, against the factor which makes for civilisation. Hence all mass discharges of emotion, typified in revolutions, have the effect, so to speak, of promoting the ultimate revivification and promotion of culture. But the effect is quite different in those forms of mass reaction having the nature of *mass intoxication*.

Whereas the phenomena of intolerance are determined by the vegetative stream of the mass intuitive system,—since it is from here, the seat of the great subconscious, that the sensitisers penetrate into the collective consciousness, rendering it intolerant and thus subject to allergic reactions,—in the case of mass intoxication, as in that of the individual, the intoxication is exclusively dependent upon the nature and intensity of the poison. The functions specifically affected are those of the cortical system.

At this point we must pause to cast a glance at the structure of the collective soul. It was stated that in the social organism there is also developed a vegetative element corresponding to the instinctive self of the individual, an element which we have designated as the mass intuitive system; furthermore, that the formation of this mass system is dependent upon the forfeiture on the part of the single individual of his cortical self.

In the meanwhile within the social organism the cortical self is also being developed into a cortical system. Moreover, it must be assumed that some intermediary process takes place between the cortical and vegetative systems.

Mass intolerance is associated with the vegetative system, but mass intoxication is connected with the mass cortical system. In the picture of every human intoxication we can distinguish between poisons which penetrate into the body from without and toxins which are formed within the body itself from where they proceed to intoxicate the entire organism. This is what is understood by the term *auto-intoxication*, and these forms frequently lead to phenomena of intolerance. In the case of mass psychic phenomena it is also necessary to differentiate between auto-intoxication and external intoxication. As intoxication is effected by way of the cortical system, it becomes possible by this means for a single individual to influence the mass. Hence personalities are able to exert an intoxicating effect on the social organism, provoking movements which can be recognised as the effect of such an intoxica-

tion. Thus we are confronted by the underlying problem of mass psychology and to the question: Is there such a thing as *mass suggestion*? Wherein lies the power of influencing a group by suggestion? Is there any difference between phenomena corresponding, respectively, to mass hyper-sensitivity and to mass intoxication? Is mass 'infection' the result of intoxication or of susceptibility to suggestion?

And this leads me to the discussion of the difference between mass infection and mass suggestion. The social organism can be both infected and influenced by suggestion.

In order to elucidate these points I should like to quote a few facts which will shed light on our further discussions. I will describe the phenomenon of the mass psyche in the words of the supreme authority on mass psychology, Le Bon.

Le Bon says: 'The most peculiar characteristic of mass psychology is the following fact: Whatever may be the nature of the individuals who constitute this mass organism, however similar or dissimilar their ways of life, occupations, characters or intelligence, through the mere circumstance of their conversion into a mass organism they become endowed with a collective psyche, through the operation of which they feel, think and act in a totally different fashion from the way in which they would individually feel, think and act. There exist certain ideas and emotions which are revealed only in individuals who are associated in a mass collectivity, by whom they may be converted into action. The psychological mass organism is a temporary being, composed of heterogeneous elements which have become temporarily associated, in the same way as the cells of an organism through their union form a new being endowed with totally different qualities from those possessed by the individual cells.' This explanation of Le Bon shows in particular that individuals in the mass assume the form of a unit and therefore react as a unit to their environment. From this it follows that there must exist some bond of union (or biologically speaking, some agglutinant) which binds the single individuals into a collective group.

What can be the nature of this agglutinant and through the operation of what processes do individuals associate themselves collectively?

There exists between all individuals a capacity of contact. A similar principle underlies the impulse of each organic cell towards organisation and association in a cellular community. In view of the fact that the subconscious in man proceeds from his vegetative self, the tendency of the single individual to associate



himself with a group will be in part foreshadowed in his vegetative stream, or intuitive self. The association of the individual into a group can be effected by enlisting the cortical self for the formation of a cortical system and by enlisting the intuitive self for the formation of a mass intuitive system. Thus it becomes possible to secure influence both over the cortical self and the intuitive self of human beings.

The following example may serve to illustrate this process. When members of a group indulge freely in alcohol the spirits of the party tend to rise very considerably in a definite direction. During this stage of semi-intoxication the vegetative self of each individual and of the whole group is affected and influenced. In this way the vegetative system formed by the temporary fusion of the single individuals acquires a new form of reactivity. All inhibitions fall away and a free and unrestrained mood prevails. This is what is seen in all carnival and similar festivals, and this indeed is the object desired.

Or to give another illustration. In anticipation of a performance the cortical self of the individuals gathered together is directed on the performer in a state of tension, associated with a disposition to be influenced by the coming performance. This represents a spontaneous reversal of a state of reactivity, for the attention of the assembled group appears to be centred on one sole interest. Such phenomena can be noted in all meetings, church services and concerts. There always exists a kind of spontaneous massing in which sometimes the cortical system, at other times the intuitive system, predominates. In the human organism one of the many methods of affecting the vegetative stream and of influencing the individual in a uniform direction is obtained by the administration of a uniform type of nutrition, prepared in a definite way; for we know that nutritive factors are capable of influencing and modifying the tissue turgor in the individual. Mental influences exert the same effect.

Thus ideas can also exert mass influence along two directions. A person may assimilate or only accept an idea. In the individual the assimilation of an idea is effected through his intuitive self and in the collective organism through the intuitive system. Ideas which have penetrated and been assimilated by the intuitive system remain the permanent possession of the mass organism; through the operation of cell memory they are transmitted and become embodied in the ancestral consciousness. This ancestral consciousness, as we have shown, becomes the subconscious of the single individual. It shapes his pre-consciousness and is inherited

with the genotypic predisposition. Thus the ancestral consciousness represents the subconscious factor of inheritance.

The contact of ideas with the mass group must not be regarded as a simple process or as a pure reaction. On the contrary, we are here concerned with a highly complicated phenomenon. The idea is first taken up by the cortical system, from which it can be accepted, without being assimilated by the intuitive system. Then there are ideas which are dropped again, ideas of but short duration. The intuitive system only assimilates and retains such ideas as possess superior ethical value. In this way it was brought about that the concept of Right has continued to live with us as our permanent possession, and that the sense of Justice and the concept of Law, as embodied in the Ten Commandments, are ineradicably fixed, for the reason that they have been absorbed by our intuitive system.

The more hyper-sensitive the intuitive system, the greater will be the resistance which it offers to the reception of foreign ideas. The less sensitive this intuitive self, the more easily can it assimilate new ideas which have been accepted by the cortical self.

Therefore the mass cortical self would be the first to accept new ideas. This 'acceptance' is to be conceived in the following manner. As was stated, during the process of mass organisation the single individual forfeits his cortical self. A collective cortical self is created in the form of the cortical system. This cortical system which is alien to the vegetative system can be replaced by the cortical self of the authoritarian personality who is able to exert mass influence. In other words, the mass vegetative system thinks with the cortical self of the person whose ideas have obtained a hold on the collective organism; that is to say, it thinks with an alien cortical self. This process may be considered identical with what is known by 'mass suggestion'. A certain number of the single individuals that have become mass associated will accept the new idea and will endeavour to similarly influence all those persons who have not yet forfeited their own cortical self. This process corresponds to what is known as 'mass infection'. But ideas which are propagated in such a way are predestined to defeat. They have no secure foundation so long as they have not been assimilated by the vegetative system, and so long as their acceptance and transmission are based upon the invariable non-sensitivity of the cortical system. For the collective psyche also possesses its conscious and subconscious elements, the products of experience. All that is inherent in the intuitive system remains subconscious. Our sense of right, of morality, our reverence for our parents. All these values,

acquired by the intuitive system as the result of experience, are firmly anchored within us. Equally deeply rooted in the subconscious is the love of one's native soil and the sense of patriotism. These factors tend to be hurled to the surface in eruptive form and to be transferred to the sphere of cortical consciousness whenever the mass mind is influenced by an idea which involves them. In such cases we are concerned with latent emotional values existing in the cell memory, which by reason of their nascent state acquire an increased emotional character.

I therefore feel justified in stating that the collective organism can be influenced in two manners: through the utilisation of the cortical system or of the intuitive system respectively. In the first case an idea is accepted, in the second it is assimilated. But the factor which determines whether the process is to be one of acceptance or assimilation does not lie exclusively in the mass collectivity, but is also inherent in the nature of the idea itself. Worthless, base or ethically inferior ideas are at best only accepted, but they never become assimilated by the vegetative system so as to take root. Here, as elsewhere in nature, the principle of selection prevails. The more hyper-sensitive and cultured a nation is, the greater will be the intolerance which it will show toward the assimilation of base ideas of an ethical standard fundamentally inferior to its own thoughts and ideas.

Le Bon continues in his exposition: 'It is a simple matter for the collectivity to determine the measure of differences existing between an individual of its own group and an outsider, but it is not so easy to establish the cause of these differences. In order to discover these causes it is well to bear in mind that modern psychology has established the fact that certain subconscious phenomena play a preponderant rôle, not only in organic life, but also in the functions of the intellect. The conscious mental life plays a very negligible part compared with the subconscious psyche, and the most detailed analysis and the keenest observation have failed to account for more than a very small number of our conscious motives. Conscious actions proceed from a subconscious substratum, mainly the creation of hereditary influences wherein are embedded the innumerable ancestral traits which constitute the soul of a people. In the background of our admitted motives for action there doubtless exist other secret causes the existence of which we do not admit; but behind these there are yet others of which we are totally unaware. The majority of our daily actions are merely the result of hidden motives, unrecognised by ourselves.'

Le Bon emphasises the significance of the subconscious pheno-

mena and speaks of a '*mass ancestral consciousness*'. This ancestral consciousness operates as a factor of which both the individual and the mass group are unaware, and is an element included in our conception of the mass vegetative system. Le Bon also recognises that the motives for our actions lie in the subconscious, and we agree with him in holding the vegetative experiences of the intuitive self responsible for them. By virtue of man's bisexual disposition even the subconscious within him is never homogeneous but is constituted of male and female elements of consciousness and of subconscious values of experience. This heterogeneity within the individual, often so noticeable in his individual character and behaviour, disappears from sight in the collectivity and appears to be overlaid by the homogeneous mass elements.

Le Bon asks what is the cause of the difference existing between mass and individual reactions. In his opinion this is based upon a variability in the structure of character. This concept will be intelligible to us if we recall that the separate characters forfeit their individual being in the formation of the collective character. But even this collective character will not be homogeneous, for its heterogeneity will be determined by individual factors varying in type and disposition. If we consider to what great deviations an individual character is subject, we shall readily understand how much more numerous and multiform must be the elements of character possessed by such a collectivity. Le Bon attributes to three factors these differences between mass characterologic behaviour and the attitude of the single individual.

He states that the first of these causes lies in the fact that 'the mere circumstance of collective union confers upon the individual *a sense of unconquerable power*'. This feeling enables him to follow impulses which as a single individual he would have been compelled to restrain. But in view of the anonymity with its resultant lack of responsibility any such motive will be lacking for the exercise of such inhibitions as customarily restrain him as an individual.

Le Bon next refers to those factors which check the subconscious impulses in the individual. Man is always at pains to veil his instinctive processes, to cover up and conceal that part of his life which is dominated by impulse. He is incited to this through his apparatus of inhibition, the consciousness which has been developed within him. It should be remembered that it is to the intervention of this apparatus of inhibition that man is chiefly indebted for his high state of evolution within the animal kingdom. The developed sense of responsibility represents part of the

conscious ego and is one of the most valuable regulators which mankind has acquired as a result of embodiment in his environment. It is upon this regulatory mechanism that is based his capacity for sociological group association. In the process of repression resulting from inhibition of the subconscious urges of his emotional life is to be seen one of the biological bases of the formation of states. But from the moment that the individual's sense of responsibility ceases to be a matter of concern his conscience also disappears, leaving a free passage for the emotions.

A second cause of difference between individual and mass behaviour Le Bon attributes to *infection*. He says: 'Infection also contributes to produce the expression of and tendency to special characteristics. Infection is an easily recognisable but unaccountable phenomenon which must be included among the hypnotic phenomena which we will next analyse. In a collectivity every motion, every action is infectious, to such an extent indeed, that the individual very easily sacrifices his personal interest to the collective interest. The capacity to do this is entirely foreign to his nature and one to which a human being can only rise when he is a unit of a group organism.'

Now to add a few remarks to Le Bon's interpretation. In the first place, the very idea of 'infection' presupposes the existence of an infection-carrier, and the possibility of mass infection cannot be doubted. In an infection the presence of an exciting agent as not only the inciting, but also the causative factor, must be taken for granted. As a causative factor the agent approaches the group from without. Both ideas and personalities may assume the rôle of such an agent and may thus infect the collectivity. It is important that we thoroughly realise the powerful effect exerted by infection on a mass group. Only thus can we properly interpret the great hold that Hitler was able to acquire over the German people. His influence was actually that of an infection operating by means of hypnotism. Everyone who has ever been in his presence has stated that 'Hitler has such magnetism that in speaking with him one absolutely believes everything that he says'. Even such a person as Furtwängler was obviously impressed by Hitler's personality. But Hitler himself was merely a medium of his so-called 'intuition'. He was subject to fits, as is generally known, and showed all the symptoms characterising the epileptic constitution.

In this connection it is worth referring again to Nietzsche's words that 'the German people are particularly prone to mental infection'.

The third and most important cause of the difference between

individual and mass reactions is considered by Le Bon to be *suggestion*. He says: 'This suggestion is produced in individuals who are mass associated by special characteristics which are in complete contradistinction to those possessed by the isolated individuals.' It is susceptibility to suggestion that produces the above-mentioned infection. In order properly to understand this manifestation it is well to bear in mind certain new discoveries in the realm of physiology. Le Bon says: 'We know that as the result of various procedures a person can be set into a state in which, after having lost his whole personality, he obeys all the suggestions of any individual who has robbed him of the consciousness of his own personality.' Now, according to carefully conducted observations, it would appear that an individual who has for a certain length of time been absorbed by an actively operating collectivity is situated, as the result of emanations radiating from the group or through some other unknown cause, in a peculiar state, closely resembling the fascination which assails the hypnotic subject under the spell of the hypnotiser. His conscious personality vanishes completely, he is deprived of will power and the ability to make decisions, and all his thoughts and feelings follow the directions decreed by the hypnotiser.

This is approximately the state of affairs prevailing in the case of an individual belonging to a psychologic group. He ceases to be conscious of his own actions. As in the case of the hypnotic subject, it is possible that while certain faculties cease to operate in him, others may be greatly stimulated. Under the influence of suggestion he will obey an irresistible urge to carry out certain actions, and this urge is still more irresistible in the case of the group than in that of the hypnotic subject, for the reason that the suggestion, equally present in all the individuals of the group, is strengthened through reciprocity. Thus Le Bon summarises the main symptoms characterising the individual merged in a group in the following words: 'Disappearance of the conscious personality; predominance of the subconscious personality; orientation of all thoughts and emotions in the same direction, as the result of suggestion and infection; tendency toward immediate execution of the idea suggested. The individual ceases to be himself, for he has become a pure automaton devoid of will power.'

If we consider these statements a little closer we find that there exist extensive connections between the mass phenomena and the reactive phenomena in the individual on the physical plane. The science of pathology has taught us the concept of *inflammation*, and to-day we speak of a locally caused inflammation and of an aller-

gic inflammation. Whenever a foreign body penetrates into the tissues it may provoke inflammatory changes at the site of injury. This will represent a case of *local inflammation*. But the case is quite different in those inflammatory manifestations which take the form of sepsis. These belong to the type of *allergic inflammations*.

Such inflammations may also be observed in mass groups and can be clearly differentiated. As language so correctly expresses it, 'the masses become inflamed'. They react 'in an inflammatory manner' to a definite idea or person or, generally speaking, to a definite factor. This inflammatory reaction may be localised in character and may play itself out. On the other hand, it may take possession of the entire social organism, assume the form of sepsis or of mass intoxication and represent one of the group of allergic inflammations. In the former case the part affected would be the mass cortical system, in the latter case the mass intuitive system. All attempts at external uniformity aim to produce changes in the mass cortical system and are based on the acceptance of foreign influences. This leads to a massing and levelling of ideas and phenomena. The specifically individual and personal element is eliminated, it is ignored and becomes overlaid by a foreign ego. Thus an alien ego-personality and an alien cortical system are imposed upon the intuitive system. Such phenomena can very often be noted in the mass psyche, and this process would appear to correspond to our concept of mass suggestion. Suggestion is based on the elimination of the conscious part of the personality.

If we briefly survey this train of reasoning we can clearly detect the direction in which the mass psyche is able to react. In the state of non-sensitiveness, or anergy, it is susceptible to the influence of suggestion. The mass group always shows greater torpidity than does a single personality. Le Bon maintains that 'by very reason of his membership in an organised group man is descending the ladder of civilization. In his single state he was perhaps a cultured individual; in the mass state he is a barbarian, that is to say, a creature of impulse. He possesses spontaneity, impetuosity, savagery, but also enthusiasm, the heroism of the primitive being.' This description in itself indicates the vegetative factor that determines all mass reactions. It is precisely spontaneity and impetuosity that are so characteristic of all allergic reactions. The mass groups can be influenced in their reactions. We can either increase or moderate them.

The mass groups are variously constructed. Freud distinguishes groups showing opposite trends of development. These groups may be either primitive or highly organised, they may be with or with-

out a leader. As examples of highly organised permanent groups Freud instances the church, representing the community of believers, and the army, as a community welded to a unit through the conscious will.

The cortical system demands reality, involving increased restrictions and all those emotional complexes which are mentally conceived and dominated by the will. It is concerned to control events through the will and therefore strives always to attain actualisation through a levelling and massing of the emotions, such as would lead to the formation of organised groups, for example volunteer armies or the militia. This is the principle underlying the formation of the various types of organisation.

The intuitive system demands fantasy, myths. This need proceeds from the submerged inherited memories which slumber in the pre-consciousness in the form of an engrammatic complex of past times. The instinctive self endeavours to escape from the world of reality and seeks a dream world, a form of existence in which all desires and hopes may be realised. In this domain is rooted the emotional energy which aspires toward religion.

Thus if it is asked which part of the social entity demands the hero and which the saint the answer will be as follows:

The cortical self strives through the paternal bond in the individual toward group association in the form of an army and it demands the hero, the heroic figure. The individual's bond to his mother and through her to his home is collectively revealed as a need for faith and religion. In the abstract this seeking and feeling leads the group to the saint who takes form as the founder of a religion, and in his supreme manifestation, as the Saviour.

Heroes and saints are the products of those ideals without which the world could not exist, but would be doomed to destruction, without hope of recovery.

The hero exercises his control over the mass cortical system of the group by virtue of its helplessness. A group can repulse in a twofold manner: through helplessness or through rejection. A state of helplessness is the prerequisite of 'infection' or 'mass suggestion'. It is the result of anergy.

Rejection is the feature of mass immunity. Its momentum is based on 'repetition', 'imitation', and is the consequence of allergy.

The appearance of the hero is associated with the helplessness of the group, whereas the arrival of the saint is due to the mechanism of selection. From this arises the inner power of the saint, his wealth of emotion, whereas domination by the hero is exercised through external forces. Thus the hero will demand external



evidences of his power, in order to prove himself. This leads to all the cruelties and barbarities which are repeated from time to time in all their various forms and resulting excrescences.

The very opposite conditions prevail in the case of the saint or founder of religion. He is not dependent upon external means, for he addresses himself to the personal and instinctive element. He does not need to fight for his position, for it is obtained as the result of an inner conflict, from an act of repulsion and intolerance which has been created in the intuitive system. The saint evolves from the group; the hero, on the other hand, never develops *from* the group but always addresses himself *towards* the group. He directs himself to the conscious element, the saint to the subconscious element. The Hero demands the myth; the Saint is himself the myth.

This demand for a hero has undoubtedly contributed in great measure to the readiness with which the German people accepted Hitler and glorified him as a hero, and he well knew how to spread around him this 'heroic myth'. His whole technique represents a careful and systematic elaboration of the myth *motif*. He never tired of saying 'Destiny has chosen me', and all his collaborators aided him in this effort to convert Nazism into a religion. *Mein Kampf* replaced the Bible. All religions have their individual rites and cults, characterised by endless repetition. Hitler's slogans and 'Heil Hitlers' represented the Nazi forms of ritual.

And inasmuch as the hero is dependent upon the myth, the myth was converted accordingly into one of the most powerful instruments wherewith Hitler was able, not only to influence his own country, but also to obtain such a tremendous hold on the other countries of the world. He knew how to work upon the most primitive instincts and realised, for example, that the cheapest way of approaching a large community was to arouse its latent emotion of anti-semitism. How few there are who are not tainted with this prejudice!

If we wish to counteract this 'hero cult' with its demand for the heroic figure, we must offer the people of Germany in its place the real and positive truth, namely, the saint or what the saint stands for. In other words, we must reinitiate in them a profound sense of religion, by the restoration of all those eternal values which have always stood for religion.

Only the vegetative stream of the individual and of the group can determine world events. From the tension of the emotions and the potential differences proceed all the energy and momentum that dominate the dynamic forces associated with universal

phenomena. The reactions between the group and the environment can proceed in a twofold manner, through the action of the group on its environment and through the operation of the environment on the group. In the first case the instinctive system projects into its environment—the saint; in the second case the mass cortical system draws out from its environment—the hero.

Ergic capacity exerts a creative influence on cultural values. All conflict resulting from reciprocal tensions and leading to the various forms of conflict between individuals and the group operate in conformity with a uniform mechanism. All these cases represent a protest against the vegetative self on the part of the cortical self. Conceived from a universal aspect this represents the conflict between the form of the hero, produced by the cortical personality, and that of the saint, proceeding from the intuitive self. The saint is the sublimated correlative manifestation of our imagination; the hero is the sublimated correlative manifestation of reality.

It can thus be seen that all phenomena of the collective soul and of mass reactions are subject to the same biological law as governs the phenomena associated with the individual. In the group ergic capacity also assumes the form either of collective intolerance or of collective immunity. In the mass soul, as well as in mass turgor representing the state of the mass tissues, allergic reactions are produced.

As has been said, the reactions of associated individuals are characterised by spontaneity. The degree of spontaneity is in accordance with the suddenness of the hyper-sensitive reactions. The explosive and emotional nature of the reactions of the mass soul is paralleled by the shock-like, explosive manifestations accompanying anaphylactic reactions in the individual. The terms Physiology and Pathology can be applied to the social group as well as to the individual.

I consider the herd instinct to be a group physiological phenomenon, for it is based on the tendency to organisation existing in all forms of nature. As in the anorganic world it is the crystal, so in the organic world it is the cell that is impelled to organisation, to association and to the formation of cellular complexes. This impulse to organise is one of the most fundamental characteristics of living substance and the basis for the construction of living organisms, for an organism represents the totality of all the associated cellular systems. The mass need of group association is also rooted in the urge towards organisation. The herd instinct impels the single individual to join the group, and this fact constitutes

the basis of all the various types and grades of social grouping and political association. Conceived as an organisation, the state embraces the individual as well as the collectivity, even as the single individual unites within himself the various organs to form an organic entity. An organism is the expression of organic co-operation.

In all mass phenomena, movements and reactions, we must distinguish the normal or physiological from the diseased or pathological conditions. As an example of a reaction occurring in the normal mass consciousness we could instance the incitement of a group to artistic or sport activities. This phenomenon results from a social group having its attention directed to a common experience, whether this be in the realm of the theatre, concert hall, or place of sport. Under these circumstances a union is effected between the cortical and the subconscious elements, whereby the single individual becomes converted into the state of the mass personality, thus becoming a part of this spontaneously created mass psyche. This portion of the mass psyche becomes contributory to the operations of the individual psyche and causes it to react in a new manner. This leads to emotional outpourings; for it would not be possible to offer any other explanation of the enhanced performance of an artist in the presence of an enthusiastic audience, any more than of the heightened receptivity of an audience. These phenomena are based on the inductive increase of the potentials of a mass consciousness which, being newly created, shows a correspondingly greater intensity of conscious mass reaction. The spontaneity and emotional reaction expressed by the instinctive person of the group towards the performance of an individual will be different from the reaction shown by the instinctive person of the single individual.

I will give a concrete illustration to show how the mass group can be made to think and feel through the super-ego of a given performer. I have frequently had the opportunity to observe such reactions on the part of concert audiences who, for the most part, were made up of the same individuals. On one occasion a performance of one of Beethoven's symphonies, conducted by Toscanini, completely electrified the audience, who were boundlessly enthusiastic in their applause. A few days later Furtwängler conducted the same symphony with an entirely different interpretation, eliciting exactly the same enthusiastic response on the part of the audience. But there could not have been a greater difference than was shown by the rendering of the two master conductors, Toscanini, the representative of the purest classicism,

and Furtwängler, the exponent of extreme romanticism. As to the genuineness of the response on the part of the audience there could be no doubt. Confronted therefore by the question as to what it is that impels the same audience to respond with equal enthusiasm to such diametrically different performances, the answer can only be that this was a clear illustration of the super-imposition of the ego of the dominating artistic personality on a receptive audience.

The most remarkable, and at the same time the most important and significant, phenomenon associated with mass grouping is the circumstance that each individual shows increased emotionalism when group associated. McDougal speaks of an 'exaltation or intensification of emotion'. In individuals the emotions are never intensified to the same degree as is apt to be the case when they are collectively associated. The condition is one of reciprocal induction of enthusiasm. Such manifestations can commonly be observed wherever collectivities are associated by a common interest and are transported into a state of intense enthusiasm or intoxication. And does not this mechanism of reactivity correspond to what is best in us? Does not this power convert all elements tending to destruction into constructive factors? Are not the musal elements latent in every individual exposed, grasped and stimulated through these streams of induction? Are not precisely those elements associated with these factors the ones that should strive to secure the building up of culture? Do not new paths open out from here—paths which we must tread in order to utilise our biologic knowledge and thus contribute to the creation of the culture of the future?

For I ask myself, if a diseased organism which presents a disturbance of its regulations can be rendered normal and responsive to therapeutic treatment, why should it not also be possible to influence favourably a world organism which has suffered a disturbance of its regulations?

As everything that is vital in nature is subject to the law of bipolarity, we see in all phenomena a dual tendency. This dual tendency is also revealed in the materialistic and idealistic forms of thought, which always oppose each other in all systems of philosophy. I firmly believe that the universal, no less than the individual organism, possesses a heart and a soul. I have previously enlarged upon the reciprocal attitude of psychic and bodily phenomena. For as even severe manifestations of disturbed cardiac functioning can to-day be largely corrected and even permanently cured through adequate measures, so also can psychic disturbances in the individual also be remedied by proper forms

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of treatment. Can it be, then, that only the disturbed psychic state of our universal organism should not be amenable to cure, even after its disturbances have been accurately interpreted and the correct methods of treatment have been recognised and applied? I do not believe this is so; on the contrary, I am convinced that through the conscious interposition of purely ideal values this universal organism which is so completely infected with the contagion of materialism may yet be cured.

The biologic facts which daily, nay hourly, confront us in human pathology must and will contribute to a better understanding of the pathological manifestations within the social organism. The fate of the individual, of a community, and hence of a nation, is determined by the intuitive self, by the vegetative stream.

Every multicellular organism is impelled toward organisation. The state is such a multicellular organism. Therefore the mass psyche will also seek to burst the confines of individual limitations and will demand union on a broader basis. McDougal explains the carrying away of individuals as emotional infection. He definitely mentions the 'principle of direct induction of emotion by way of the primitive sympathetic response'. The potential tensions are based on increased emotionalism, to which also correspond the heightened potential charges. These potential charges represent the possibilities of mass reaction, and they are the prerequisites of cultural accomplishments, for the latter also derive their energy from the potential tensions.

Mass reactivity depends upon mass ergic power, which leads either to immunity or to intolerance. From immunity the mass organism derives its power of resistance and self-protection, from intolerance its power of rejection, leading to the most varied forms of hyper-sensitive reactions and always bearing an allergic character. Viewed in this light the various phenomena which we note in the history of nations enable us to recognise a biological explanation and significance.

As nations are communities of individuals they are bound by the same laws which determine the biologic life of individuals. Every nation, as every person, possesses its own biological destiny. If individual races and nations who, for the reason that they are not rooted in the soil, are compelled to suffer continual oppression and danger of extermination, nevertheless desire to assert and insist upon maintaining their own existence, the result will be that they will not only acquire increased immunity, but also increased power to resist their environmental influences. This will cause

their intolerance to assume a correspondingly exacerbated form of expression.

This principle offers the explanation of the psychic state of minorities, a condition so varied in its forms of reaction. The mechanism of over-compensation leads to a dynamic urge, which is often completely at variance with the actual relationship between the forces. But it is from this very discrepancy between power and will to power that there result the most unexpected achievements. I may here appropriately quote the succinct and almost untranslatable words of the prominent authority on Psychiatry, Wagner-Jauregg, words, moreover, of quite general applicability. He says, 'Man muss Können wollen und Wollen können'.<sup>1</sup>

Albert Schweitzer states in a significant passage in his exposition of culture: 'It is obvious that wherever collectivities exert a more powerful influence on the individual than the latter exerts upon them the result will be destruction, because in such cases the greatness upon which all depends, namely the spiritual and ethical value of the individual, is necessarily affected. The social organism thereby forfeits both spiritual and ethical values and is rendered incapable of understanding and solving the problems wherewith it is confronted. Sooner or later it will succumb to catastrophe.' Very correct and significant is this view of Schweitzer of the conflict between the individuality and the collectivity. The catastrophe of our own time is a reflection of this conflict, manifested as a hyper-sensitised mass soul in which, not the feminine, but the masculine factors predominate.

So long as we have not learnt to appreciate all world occurrences from a biological standpoint, that is, as living substance, so long as we do not interpret the existence of manifestations of mass intolerance as a biological factor, so long as statesmen are of the opinion that they can disregard these biologic facts and can with impunity frame their plans and laws at the council table, so long, in short, as we are impeded by these handicaps of our groping past, there will remain nothing but strife, warfare and destruction, but we cannot hope for unity, peace and constructive upbuilding.<sup>2</sup>

The male substance sensitises and leads to those reactions in history which indicate downfall. Only the female substance sensitises in a constructive manner. The attainment of cultural ends can therefore, in my opinion, be effected in only one way, that is through the recruiting of the female factors for the building up of

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a state. Only a deepening of the maternal tie can lead to the intimate union of the individual and the community with the home, and thereby to the promotion of culture. 'Die Mütter sind es.'<sup>1</sup>

My only reason for discussing at such length the problem of the collective soul is because I am convinced that everyone who wishes to deal with human problems and thereby with world events must possess a profound knowledge of the whole mechanism upon which the psychic condition of the individual and of the mass organism is based. We are familiar with the psychic state of the individual through the knowledge which has been conveyed to us by Freud, Adler, Jung, and last, but not least, by Shakespeare. But we can only understand mass psychology by familiarising ourselves with all the problems of allergic manifestations interpreted as expressions of biologic intolerance. Lacking this knowledge we shall never be able accurately to determine the reliability of mass judgment. For the mass group can be influenced and its judgments are always based upon influence, because massed individuals do not think with their own ego, do not feel with their own instinctive selves, but with the superimposed ego or instinctive self of their chosen authoritarian model. Therefore we cannot sufficiently emphasise the importance of propaganda, but of propaganda based on sound biologic and psychological foundations.

## XIII

### MEDICINE

#### I

**T**HE medical problem confronting the world of to-morrow is urgent, vital and dominant. There exists at the present time no international machinery for dealing with Medicine in its relation to world affairs.

I have previously pointed out that the fate of mankind is the main concern of the medical profession and that the doctors should therefore play a prominent part in any council dealing with reconstruction and with human affairs generally.

I feel very strongly that this medical problem now confronting

<sup>1</sup> The mothers it is. (Goethe.)

the world should be thoroughly thrashed out. However, before dealing with this subject, I wish to present some general remarks regarding Medicine and Physicians.

Let me say at once that we must draw a clear distinction between Medicine as a Science and the Physician as an Artist.

We must emphasise that medicine is nothing but an instrument in the hands of the physician. To know medicine is by no means the same thing as to be a good physician. Even though profound medical knowledge is the essential condition for becoming a good doctor, this in itself does not make a good doctor. It depends upon other faculties which cannot be acquired by even the most sedulous study. A doctor is born not made. A doctor must have an artistic nature. He must possess vision, intuition, but above all, he must possess a heart and a soul. He must think with his heart. Feeling is everything. He must have a sufficiently profound nature to be able to penetrate to the very depths of life. In the words of Sir William Osler: 'The practice of Medicine is an art, not a trade; a calling, not a business; a calling in which your heart will be exercised equally with your head. Often the best part of your work will have nothing to do with potions and powders, but with the exercise of an influence of the strong upon the weak, the righteous upon the wicked, of the wise upon the foolish.'

It is the doctor's task to make himself thoroughly acquainted with all the manifold forms of human conflicts and suffering. For this reason the fundamental demand made upon a physician is that he should keep in the closest touch with life itself. A doctor without depths is inconceivable; but he must also have intuition. It is certainly not a mere coincidence that most of the best and greatest doctors should be musical, so fond of music. For medicine and music are both arts which are rooted in the same soil—vision; and they have the same goal—to discover rhythm. Both these arts are interlinked in their supreme task to find out the pulsation of life in its most essential manifestation.

Medicine in its original sense means *Heilkunst*, the art of healing. The physicians in ancient times were not only called *Heilkünstler*—artists in healing—but were recognised and respected as artists in the literal sense. We must bear in mind that in its origins medicine was exclusively based on empiricism. Practical experience alone counted. The essential and indispensable qualities required of a physician were observation and imagination, associated with the intuitive feeling of the artist. Only gradually did medicine develop into a science, and to-day we rightly consider it to be a subdivision of the great field of Biology. Nevertheless,

medicine will always remain an art. Science and art are closely associated, for they spring from the same source—imaginative vision. Without vision, without imagination, neither new discoveries nor great physicians can be produced. To quote the words of the great Jacob Henle, who died in 1885: 'The day of the last hypothesis would also be the day of the last observation.'

Only gradually did the relationship between pathologic phenomena and physiologic processes become more clearly recognised, as a result of which medicine has attained a new and more elevated plane. To-day medicine with all its many branches is based on exact experimentation. This significant change can be traced back to Claude Bernard, for it was this great French physiologist who inaugurated the system of medical experimentation. A few quotations from Claude Bernard will show the importance of his views which, in my opinion, should serve as a guide for the physician of to-day, but even more of to-morrow:

*'L'esprit de synthèse n'est qu'une plus haute puissance de l'esprit d'analyse. La nature est ce qu'elle est, et comme notre intelligence qui fait partie de la nature est moins vaste qu'elle, il est douteux qu'aucune de nos idées actuelles soit assez large pour l'embrasser. Travaillons donc à dilater notre pensée. Forçons notre entendement; brisons, s'il le faut, nos cadres, mais ne prétendons pas rétrécir la réalité à la mesure de nos idées alors que c'est à nos idées de se modeler, agrandies, sur la réalité.'*

*'Les effets ne sont ni grands ni petits par eux-mêmes. Une grande découverte est un fait qui, en apparaissant dans la science, a donné naissance à des idées lumineuses d'où la clarté a dissipé un grand nombre d'obscurités et montre des voies nouvelles. Dans les sciences biologiques le rôle de la méthode est encore plus important que dans les autres, par suite de la complexité immense des phénomènes et des causes d'erreurs sans nombre que cette complexité introduit dans l'expérimentation.'*

*'L'idée c'est la graine; la méthode c'est le sol qui lui fournit les conditions de se développer, de prospérer, et de donner les meilleurs fruits suivant sa nature. Mais de même qu'il ne poussera jamais dans le sol que ce qu'on y sème, de même il ne se développera par la méthode expérimentale que les idées qu'on lui soumet. La méthode par elle-même n'enfante rien, et c'est une erreur de certains philosophes d'avoir accordé trop de puissance à la méthode sous ce rapport.'*<sup>1</sup>

<sup>1</sup> 'The spirit of synthesis is merely a more powerful form of the spirit of analysis. Nature is what she is and as our intelligence is less vast than Nature herself, of which it is a part, it is doubtful whether any of our present ideas are sufficiently comprehensive to embrace her in her entirety. Let us therefore endeavour to expand our powers of thought.

However, the true doctor cannot be guided by experimentation alone; his most important task will always be to observe, to cure, to help, but also to suffer with his patients.

For this purpose it is imperative that every physician also keep steadily in mind the latest advances in experimental research. In order to be a great physician it is not necessary to have discovered new facts. But what is indispensable is his power of utilising the discoveries of others, sifted through his own critical judgment, applied by his reason and intelligence.

The progressive advances in Medicine occur in such rapid succession that it is quite impossible to discontinue, even for a short time, the task of following up and keeping pace with all these discoveries. Nevertheless, experimental research must always be the physician's guide, although his intuition will have to make the decision. Thus, practical experience and intuition, combined with a profound understanding of the constitution of each individual patient, must represent the court of last appeal. These must have the deciding vote. We often wonder what is the reason for a doctor's success, for his authoritative influence, and why so many doctors with the same degree of knowledge are never able to influence a patient. What are the factors upon which authority depends? Certainly not experience and knowledge. I think a doctor's success will always depend upon his personality, which we have to understand as the integration of all his attributes, both inherited and environmental, of his knowledge, his training, his

Let us force our understanding; let us break, if necessary, the frames which confine us. But do not let us presume to cramp reality to conform with our ideas, since it is our ideas which must be modelled and enlarged to the scope of reality.'

'Results are neither great nor small in themselves. A great discovery is a fact which, appearing in the domain of science, has given birth to brilliant ideas that have shed radiance upon many obscure points and illuminated new paths. In the biological sciences the part played by method is more important even than in other realms, owing to the immense complexity of phenomena and to the innumerable potential causes of error which this complexity introduces into experimentation.'

'The idea is the seed; method is the soil which has furnished it with the conditions needed for development, for prospering and for the production of the best fruits, in accordance with its own nature. But even as nothing will ever sprout unless it has been sown, so also the experimental method can only develop those ideas which are submitted to it. Method by itself produces no results, and it is an error on the part of certain philosophers to have attributed excessive power to method, considered from this point of view.'

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Let us force our understanding; let us break, if necessary, the frames which confine us. But do not let us presume to cramp reality to conform with our ideas, since it is our ideas which must be modelled and enlarged to the scope of reality.'

'Results are neither great nor small in themselves. A great discovery is a fact which, appearing in the domain of science, has given birth to brilliant ideas that have shed radiance upon many obscure points and illuminated new paths. In the biological sciences the part played by method is more important even than in other realms, owing to the immense complexity of phenomena and to the innumerable potential causes of error which this complexity introduces into experimentation.'

'The idea is the seed; method is the soil which has furnished it with the conditions needed for development, for prospering and for the production of the best fruits, in accordance with its own nature. But even as nothing will ever sprout unless it has been sown, so also the experimental method can only develop those ideas which are submitted to it. Method by itself produces no results, and it is an error on the part of certain philosophers to have attributed excessive power to method, considered from this point of view.'



personal efforts and of his inspiration. Certain it is that the last riddle of authority can never be explained.

The development in medicine has progressed rapidly since the beginning of this century. During the period between the two wars its character has completely changed. Indeed, this change is so marked that most of the facts which were learned at the time when I was studying are now quite out of date. We can rightly say that medicine has undergone a basic change during the past three decades.

In discussing Medicine we have to recognise the paramount importance of the rôle played by the continental schools of Medicine. Let me quote from a letter bearing on this subject, written by Sir William Osler many years ago.

Berlin, Nov. 25, 1873.

‘It would be superfluous to speak of the advantages here offered for medical studies. The names of Virchow, Traube and Frerichs in Medicine and Pathology; of Langenbeck and Bardeleben in Surgery; of Du-Bois-Raymond and Helmholtz in Physiology and Physics are sufficient guarantees; all of these men, who though they have been prominent figures in the medical world for a long time, are still in their prime as teachers and workers. In contrast to London, where the teaching is spread over some twelve schools, it is here centralised and confined to the Royal Charité; for though there are several smaller hospitals in the city, yet they have no schools in connection with them, but are used chiefly for training nurses. . . . There are only three or four Americans here, and the same number of Englishmen. They go chiefly to Vienna, where greater advantages are offered in all the specialties. The native students seem a hard-working set, much given to long hair and slouched hats, and a remarkable number of them wear glasses. They possess the virtue, quite unknown as far as my experience goes, among their English or Canadian brethren, of remaining quiet while waiting for a lecture, or in the operating-theatre. There is never the slightest disturbance, though most of the lectures give what is called ‘the academical quarter’, that is, they do not begin till fifteen minutes past the appointed hour. . . .

But it is the master mind of Virchow, and the splendid Pathological Institute which rises like a branch hospital in the grounds of the Charité, that specially attract foreign students to Berlin. This most remarkable man is yet in his prime (52 years of age), and the small, wiry, active figure looks good for another twenty years of hard work. When one knows that in addition to the work at the Institute, given below, he is an ardent politician, evidently the leader of the Prussian Opposition, and a member on whom a large share of the work of the budget falls; an active citizen, member of the Council, and the moving spirit in the new canalisation or sewerage system; an enthusiastic anthro-

pologist, as well as a working member in several smaller affairs,—some idea may be formed of the comprehensive intellect and untiring energy of the man. On Monday, Wednesday and Friday from 8.30 to 11 he holds his demonstrative course on pathological histology, while on the fourth day at one o'clock he lectures on general pathology. Virchow himself performs a post-mortem on Monday morning, making it with such care and minuteness that three or four hours may elapse before it is finished. The very first morning of my attendance he spent exactly half an hour in the description of the skull-cap!

On Wednesday and Saturday the demonstrations take place in a large lecture-room accommodating about 140 students, and with the tables so arranged that microscopes can circulate continuously on a small tramway let into them. Generally the material from 10 to 12 post-mortems is demonstrated, the lecturer taking up any special group and enlarging on it with the aid of sketches on the blackboard, and microscopical specimens, while the organs are passed round on wooden platters for inspection. A well-provided laboratory for physiological and pathological chemistry also exists, as well as rooms where men may carry on private investigations; and a library and reading-room is now being fitted up. A description of some of the other classes and things of interest must be reserved for another time'.

A medical school cannot be created unless it possesses clinics with very many beds and a staff of highly qualified assistants. But such a staff can only be created if the Government pays, not only the assistants, but all the teachers of Medicine as well, and all the Clinical directors. The medical school must be supported by the Government and not by charity.

A medical school should be entrusted to highly qualified and experienced clinicians whose duty it should be, not only to treat the patients, but also to lecture on the cases. Only the maintenance of a large number of beds can adequately furnish the assistants with the requisite opportunity and variety of material that will enable them to carry out detailed work and investigations. Clinical research work must be carried out in addition to the treatment of patients.

Let me emphasise that in Vienna, for instance, every medical clinic had about 200 beds. As early as 1785 the Emperor Joseph II created the 'Academia Medico Chirurgica Josephina' for the purpose of training competent military doctors, and this institution was connected with the military hospital which contained 1200 beds. The instruction covered all branches of Medicine. It is not surprising, therefore, that a student was able to acquire a profound knowledge and extensive experience when such opportunities and facilities were offered him. If it is desired that a medi-

cal centre be created by the establishment of a medical school, it is essential that the pupils should never be taught to express their scientific findings in a brief way, but should be made to acquire the habit of thorough discussion and elaboration, always bearing in mind that a detailed scientific presentation can never be too long.

If we survey the accomplishments in Medicine during the past three decades, I think we can truly say that the whole foundation of Medicine has been completely shattered. What has occurred is that during this time Biochemistry has been thrust into the foreground. It has strongly influenced biological investigations and it is mainly due to this new emphasis on the chemical aspect of phenomena that our knowledge has been so greatly advanced.

Let me very briefly review the most striking phases of this development.

At the time when I was a medical student the whole concept of Medicine was purely morphological; that is to say, it was based exclusively on Anatomy. Anatomical changes alone were deemed worthy of consideration. If it was not possible to demonstrate that an anatomical change was the cause of a complaint, the disease was held to be neurasthenic in nature. Only gradually did we realise that most symptoms are caused by a functional disturbance of the system. Hence a chemical point of view was adopted from which we gradually learned to understand the regulations within the human organism.

Our understanding of functional disturbances has been greatly fostered by the science of Endocrinology, and the clinical significance of hormonal disturbances has become further extended since the last war.

A landmark in Medicine was reached when Eugen Steinach of Vienna demonstrated in his classic experiments the masculinisation and femininisation of rats, whereby he showed the presence of male and female sex hormones in every individual. To-day all the various hormones are synthetically produced, and are used in everyday practice.

To mention another epoch-making discovery—in the year 1922 Banting and Best of Toronto discovered and isolated Insulin, a hormone of the pancreas. One of the main results of this discovery was to make diabetes curable.

To-day we know that the mental condition is governed by the hormonal system. Many kinds of mental disturbances are caused by functional disorder of the hormonal system, and it has been

conclusively proved that such conditions can be successfully treated from this angle.

In view of all these startling and significant advances in Medicine, it is all the more surprising to record that they have unfortunately contributed nothing to the general improvement of humanity. There exists an alarming discrepancy between this constructive effort and all those scientific activities which aim at destruction. Elsewhere I shall have to utter a firm protest against all such destructive applications of science.

Let me give another instance—the discovery of the vitamins. As early as 1720 the Austrian military doctor Kramer discovered how to treat scurvy successfully by the addition of oranges, lemons and other fresh fruit to the diet. In 1897 van Eijkman discovered the proper treatment of the disease called beri-beri which was prevalent in a Javanese prison camp. But not until 1906 were all those findings rediscovered and used as the starting-point for further research. Then the ball was definitely set rolling when in 1912 Hopkins and Funk originated the vitamin theory and provided the scientific basis for all further developments along this line. The most important research work on vitamins was carried on by British scientists, and Great Britain should therefore quite definitely be called the birthplace of vitamin research. Men like Hopkins, McCarrison, Drummond, Mallanby and John Orr will for ever be famous in the history of Medicine as the pioneers in this new branch of science. They deserve the gratitude of the whole scientific world. But I cannot here go into further details on the subject of vitamins, for which I must refer the reader to a later chapter, as well as to my book *Nutrition and Victory*.

Since the last war the effects of salt-free and unfired food (Rohkost) have also been discovered. It is to the credit of Max Gerson, now in New York, to have stressed the importance of a salt-free diet in the treatment of migraine and tuberculosis. The fact that salt is very often responsible for the occurrence of inflammatory processes, whilst the avoidance of salt is highly effective in curing acute inflammations, had already been emphasised by Karl von Noorden. But Gerson it was who first suggested a salt-free diet as a new method of treating various diseases.

Another turning-point in Medicine occurred when Bircher-Benner (Zurich) drew attention to the damage wrought to the whole organism by protein-rich food. He inaugurated the raw-food diet and in all his records shows that the most difficult diseases can be favourably influenced and even cured by dietetic means alone. Bircher-Benner's theories were, of course, strongly

opposed by all the representatives of the old school of Medicine. But that did not shake him in his convictions. The energy with which he fought for his opinions should serve as an example for all future investigators. To-day, since the discovery of the vitamins, the important work of Bircher-Benner has not only been confirmed but can now be properly interpreted. It is certainly one of the greatest achievements in modern Medicine to have recognised the important rôle played by diet, and consequently by nutrition, in the preservation of health.

I shall later on dwell at some length on the relationship between nutrition and the mental state. Suffice it here to say that nutrition must be considered as the most important factor in influencing *the mental and psychic condition of a nation*. Let me quote the words of Sir Robert McCarrison: 'There is indeed at the present moment no more important thing than the question of the proper feeding of the nation, and there is no greater need than enlightenment in the nutrition problem.'

Although the discoveries of Bircher-Benner must be regarded as a definite landmark in the history of Medicine, the work of a great English pioneer in this field, Alexander Haig, is too fundamental and important to be even mentioned *en passant* in such a brief survey. I hope to devote extensive consideration to this scientist in a subsequent publication.

At the time when I concluded my medical studies Paul Ehrlich's discovery of Salvarsan, involving a fundamental change in the treatment of syphilis, represented a new epoch in therapy. I well remember the fight against Salvarsan and the many cases recorded in which its administration was followed by blindness, sudden deafness, etc. Actually it was my uncle, Professor Max von Zeissl, the son of the great syphilologist Professor Hermann von Zeissl, who brought to Vienna the first Salvarsan, given to him by Ehrlich.

At that time nothing was known about the allergic reaction to arsenic, that is, to Salvarsan. The more we familiarised ourselves with the details of this treatment and with the manifold reactions of hyper-sensitiveness, the more did we learn the correct manner of carrying out the Salvarsan treatment. This knowledge produced very striking results.

Fundamental changes were introduced in the treatment of syphilis by Wagner von Jauregg's discovery that creeping paralysis could be successfully treated by malaria therapy. The effects were unbelievable. Whereas in my own student days we were daily shown the various forms of post-syphilitic nervous disorders, since the discovery of the malaria therapy all these have been

automatically eliminated and it is now almost impossible to show students any cases of creeping paralysis. But it was the merit of the Viennese clinic of Syphilology to have introduced the combined treatment of Salvarsan and malaria (fever) therapy for the cure of syphilis itself. As a consequence of this combined treatment, not only has syphilis become entirely curable, but all the associated nervous diseases have been rendered preventable. Wagner von Jauregg's discovery will remain a milestone in the history of Medicine, and it is obvious that he should have been honoured with the Nobel Prize.

Quite recently we have witnessed the effects of the sulphonilamides (M and B)—a revolutionary cure for pneumonia and septic conditions. And to-day we are impressed by the discovery of Penicillin and are told that this new preparation claims to be able to cure acute syphilis within five days! This discovery by Sir Alexander Fleming is undoubtedly one of the greatest of recent times. Let me emphasise that this discovery which so greatly benefits humanity was made during this war! Surely a significant symbol. A paradox at a time when the most deadly weapons are steadily being improved for the destruction of the race! Should not this serve as a warning against further aims at destruction? Should not this work of Sir Alexander Fleming give us the right to claim that we physicians are the foremost helpers of mankind, and that therefore we should also have the right to a decisive voice in all questions concerned with the settling of human affairs? Can it be right that while we labour only for the benefit of the race, politicians should possess exclusive control over its destiny? Are not men like Fleming or Best and all other pioneers of science and medicine justified in claiming the right to intervene in all vital matters affecting human beings?

But let me return to the facts.

It can readily be understood what a profound experience it was to have been a witness of this whole phase of therapeutic evolution. Not only, as I have mentioned, did syphilis in all its various forms become a curable disease, but the same has applied to Schizophrenia, the Jekyll and Hyde mysterious condition of dual personality. A great sensation was produced when one day a young doctor demonstrated at the Psychiatric Clinic in Vienna the results obtained by his new method of treating Schizophrenia by the administration of a high dosage of insulin, thereby provoking an insulin shock. Since then this method of insulin, electric shock and other forms of shock are being successfully used to cure Schizophrenia.

Let me refer to another chapter in Medicine!

One of the most fundamental changes in our entire outlook on pathologic phenomena has taken place in the concept of Allergy. Allergy is a condition which accounts for most of the sudden, unexplainable forms of attack. The Viennese physician and pediatricist Clemens von Pirquet, the pioneer in this field, stated: 'I suggest the term Allergy to designate this general concept of an altered capacity to react.' In his classic paper on Allergy, in which he discussed immunity and hyper-sensitivity, he stated that the observations in connection with vaccination seemed to him most clearly to illuminate the connection between immunity and hyper-sensitivity. Eduard Jenner's discovery of vaccination gave von Pirquet the key to his investigations.

But it was Charles Richet of Paris who first systematically examined the phenomenology of allergic manifestations in his discussions of the phenomenon which he termed anaphylaxis. The anaphylactic shock now plays a most important part in clinical medicine and occurs very often after the administration of various sera. This shock reaction, which is sometimes fatal, was elucidated by Richet, and for his work on Anaphylaxis he was awarded the Nobel Prize.

Summarising this brief survey, it can be said that as a result of the great development of Endocrinology the treatment of rejuvenation by the modern hormonal therapy represents one of the most outstanding achievements. In Neurology a revolution has been effected by the treatment of progressive paralysis and schizophrenia. The discovery and development of vitamins has furnished practicable treatment for various previously unexplained pathologic conditions; the recognition of allergic manifestations has improved not only the understanding but also the treatment of various diseases.

All these great accomplishments in Medicine greatly inspired and encouraged me in my own work. If I now proceed to a brief discussion of the Vienna School of Medicine, it is only because I wish to make one point quite clear, a point of general significance. What I have seen with my own eyes and heard with my own ears has become part of my being. Nobody can take it from me. And it is just these experiences which remain as the only capital which Hitler and his régime have not been able to take from me. Everything else I was compelled to abandon; not only my home, my country, but literally everything that I possessed. But nobody could rob me of my knowledge, my experience and my medical skill.

All these various stages in the advance of Medicine I have carefully followed, and they have greatly influenced my trends of thought.

It is a constant matter of surprise to note how little mankind learns from previous experiences and errors. It is always the same thing. Every new idea, every new discovery is at first opposed and rejected and met by scorn and persecution. The obstacles set up to its acceptance are boundless and unbelievable, whether the idea proceeds from a Faraday, a Newton, a Kepler or a Freud. I distinctly remember the hostility shown towards the adoption of Ehrlich's Salvarsan treatment, and how greatly Behring had to fight against the opposition levelled against his anti-diphtheric serum, which was destined to revolutionise Medicine. And what about Psychoanalysis? What an outbreak of indignation followed the publication of Freud's libido theory and his explanation of dreams! He did not even succeed in having his papers published in any of the medical or neurological journals or in the Archives of Psychiatry. Nor was he permitted to address either the Society of Psychiatry or the medical associations. Finally, I should like to quote a passage from the outstanding English *History of Medicine* by Singer on Semmelweis, a man who became insane as the result of professional maltreatment.

'Among the most important reactions of antiseptic surgery was that upon the conduct of labour. Here Lister had a predecessor, as he gladly and generously acknowledged. This was the unfortunate and almost insane Viennese genius, Ignaz Semmelweis (1818-65). At the great lying-in hospital at Vienna in which he was an assistant the death-rate at one time rose to thirty per cent., the so-called 'puerperal fever' being the active cause. The women were attended by students or physicians who were visiting the post-mortem room. Semmelweis showed that the infective material that conveyed the fever was brought by the hands of the operator from the dead bodies, and he showed that puerperal fever was caused by decomposed animal matter. By insisting on the hands of the operators being sterilised, Semmelweis succeeded in 1846 in enormously reducing the mortality. After the acceptance of Lister's antiseptic system the methods of Semmelweis were universally introduced into the practice of Midwifery.'

But how interesting it is to note the sudden manifestation of the principle of cohesion among the members of the orthodox medical clique whenever a new idea comes to shatter their old inherited theories! They automatically fuse into a solid block, whilst the innovators are black-listed and treated as heretics. It is appropriate here to quote the famous words of William James: 'There



are three stages in the history of every medical discovery. When it is first announced people say that it is not true. Then a little later when its truth has been borne in on them so that it can no longer be denied, they say that it is not important. After that, if its importance becomes sufficiently obvious, they say, anyhow it is not new.'

Unless one has personally experienced what it means to be hounded by a professional *mafia*, it is difficult to realise to how much malevolence a person is exposed, how strongly a new concept is attacked and rejected, and how the originator of such an idea suddenly finds himself surrounded by enemies. But no one can enter into the kingdom of Science unless he is prepared to undergo sacrifices and is inspired to search uncompromisingly after the truth. One must fight for every new idea and therefore all investigators have to be fighters. The premises upon which new creations are based are convictions and the courage to fight for these convictions.

I have gained two valuable kinds of experience which have influenced me throughout my life. First, I have found that the more favourably a book is criticised, the greater will be the opposition it will meet; secondly, I soon realised that my conviction of the accuracy of my assumptions grew in proportion to the hostility encountered. Certainly this was a very trying time for me, but although I stood quite alone this personal experience proved a valuable educational asset.

Anyone who has fought as I have for his scientific and medical convictions and who has actively opposed all those theories which he held to be unacceptable, will automatically be converted into a fighter and will always so appear whenever the fate of his convictions is at stake. I am profoundly convinced that these convictions cannot be confined to a frontier, all the more so as I have always been accustomed to discussing and upholding my ideas at the various congresses, both national and international. It was therefore necessary for me to make unmistakably clear, both my own point of view and the reason why I felt I had the right to discuss the events that followed after 1933.

## II

I count myself in nothing else so happy  
As in a soul remembering my good friends.

(Shakespeare, *Richard II.*)

Already in 1814 the great Richard Bright saw the old Viennese Medical School during the days of the Vienna Congress. He said in his travel journal: 'My attention was naturally drawn in a peculiar manner to the magnificent General Hospital, where the medical lectures of Hildenbrand, the instruction of Boër, and the surgical practice of Kern afford great attraction to those who are interested in such pursuits. The clinical wards are greatly superior to the others.' William Mackenzie, the famous oculist, in the preface to his *Sketches of the Medical School of Vienna*, published in 1818 and 1819, says: 'The Vienna University has risen in reputation among the Catholic Universities, so that it now occupies, especially as a medical school, the very first rank. Among the foreigners who came to Vienna in order to continue their studies are not only Hungarians, Swiss, Italians, Russians, Danes and Dutch, but also French and English, and amongst them some who already had a medical practice, and even professors of distant universities.' He gives great praise to the clinical instruction and summarises his impressions with the words: 'We can scarcely conceive any improvement which could be made in the clinical education of physicians at Vienna. The system seemed to us to be perfect.'

But most interesting is the opinion about the Vienna Medical School expressed by Sir William Robert Wilde, the famous ophthalmologist and aural surgeon of the Dublin School, the father of Oscar Wilde. In 1843 he wrote a book on Austria, its literary, scientific and medical institutions. He says: 'In the years 1840 and 1841 I visited the most celebrated medical schools of the Continent, chiefly for the purpose of improving my knowledge of Ophthalmology. The high and ancient reputation of Vienna, with respect to the former subject, led me thither, and the advantages it offered upon this and many other details of medical science were such as induced me to remain there during the greater portion of my foreign sojourn.' In his book he expressed his sincerest admiration for the great Viennese Medical School and pointed out: '*In Vienna, his country and his diploma are the only passports the English student or physician requires to insure his admission, kindness and attention.*'

And now let me quote Sir William Osler, who saw Vienna in 1874 for the first time!

*Letter written by Sir William Osler.*

March 1st, 1874.

'Allgemeines Krankenhaus.'

... I left Berlin on the 29th of December, and stopped at Dresden for a few days, to see the galleries there, which pleased me very much, and then continuing my journey I arrived here on New Year's Day. With the aid of a Yankee friend, I soon obtained a room in Reitergasse, close to the Krankenhaus. The Krankenhaus is arranged in nine courts, occupying a whole district in the city, and accommodating more than two thousand patients. We were not long in getting to work, and our daily programme is as follows:

At about half-past eight we go to Hebra, who visits his wards at this hour, and at nine we go to his lecture-room. Undoubtedly he is *the* lecturer at the Vienna School, and he combined the humorous and instructive in a delightful way. I generally go every other morning to Bamberger, who lectures at the same hour, on General Medicine. He is a splendid diagnostician, but is, I think, inferior to those Berlin giants, Traube and Frerichs. At ten we have another hour on the skin, from Neumann who has the run of Hebra's wards, and an out-patient department of his own. He enters more particularly into individual cases than Hebra and gives us more differential diagnosis. At eleven we go to Wiederhoffer, the professor in the children's department, and have there in the first half-hour a series of selected cases, and in the second a lecture. There are not many in his class, so that one has a good chance to examine the children oneself. At twelve I attend a course on ear diseases with Politzer, not that I am going to make a specialty of them but I thought it would be well worth while, when an opportunity occurred, to make their acquaintance. Politzer is good, and shows us a great many cases, and makes us pass the Eustachian catheter daily. At one, Braun, the Professor of Obstetrics, lectures, but more of the Clinique shortly. Between two and four we dine, and take our constitutional, and at four we have a class on the laryngoscope. This is a six weeks' course, and I am just beginning another and take kindly to the larynx. At five we have one of our very best classes, viz. obstetric operations, with Brandl, Braun's first assistant, in which after as much theory as is needful, work begins on the cadaver. I begin next week to go on duty about every fifth or sixth day and hope to get three or four forceps cases before leaving. Altogether, midwifery and skin diseases are the specialties in Vienna. . . .

Americans swarm here, there are fifty or sixty of them at least, and Great Britain is represented by five or six Edinburgh men and a couple of Londoners. The city itself is very beautiful, having a splendid wide street, like the Thames Embankment, surrounding the inner town, and

occupying the position of the old wall and moat. I expect to leave about the end of April, and shall touch at Paris on my way home, to see the city. . . .

*Entries in the diary made by Sir William Osler.*

1874.

*January 1st, 1874.* Arrived in Vienna last night, put up at Hotel Hame-rand, explored the city in the morning and in the afternoon. With Schlofer's aid went in search of lodging-house, deciding finally on a room at Herr von Schultenkopf, No. 5 Reitergasse, Josefstadt, Thür. xiii.

*January 2nd.* Continued the survey of the city. Saw St. Stephen's Church and the chief business localities. Visited the Allgemeines Krankenhaus with Schlofer and tried to get some idea of its topography—rather difficult matter.

*January 3rd.* Visited the Krankenhaus again and made further exploration in the city.

*4th, Sunday.* Tried to find the English Church, but failed. Spent the rest of the day with Schlofer and his friend Herr B.

*5th, Monday.* Went to meet Hutchinson at the Nordwestbahnhof. Had the felicity of going to 5 of the 7 stations in the city in search of his trunk.

*6th, Tuesday.* Went to the Krankenhaus and afterwards walked round the Ring.

*7th, Wednesday.* Commenced work with Bamberger at 8.30. Neumann at 10. Wiederhoffer at 11, and Braun from 12 to 2. Much pleased with my first introduction to Vienna teachers and material.

*To Miss Jennette Osler from W.O.*

Vienna, March 22nd.

My dear Jennette,

. . . I trust this week to begin my homeward progress and will probably get as far as Paris by Saturday. It is a matter of some forty hours by rail and I shall probably break the journey either at Munich or Strassburg, the galleries attracting at the former, the laboratories at the latter. A good deal will depend on how I feel on getting to Munich after a night on the train. My friend Hutchinson is still in Paris and will act as guide there. I expect to be in London for Easter Sunday. As a pleasing change we had our proper Parson at the chapel to-day, in whose place a converted Native has been officiating for some time. Anything—High—Low—Broad—will do for me after six months on the Continent. The Chaplain here, a Mr. Johnson, is a remarkably fine-looking old man, with long white hair and a face which reminds me of the portraits of the old Musicians. There is a dash of sadness also about it as though he was one of those who did not 'take the current when it served', and hence the consequence—a chaplaincy abroad,

instead of a Bishopric at home. You see I am rather Shakespearian to-night. Shakespeare has been my light literature for some time: that accounts for it. We—Stephen (Mackenzie) and I—went for a long walk this afternoon to the Prater Park and the new Danube Channel in process of making. This latter is a wonderful work of engineering. . . . I am going to do the Royal Treasury and Stables, with one or two other little things this week, and then shall have pretty well finished the Vienna sights. My next will probably be dated Paris.

Love to all,  
Willie.

We have to ask wherein lay the great attraction that Vienna as a medical centre exerted on people from all parts of the world. Was it because the individual doctors or the various clinicians possessed greater factual knowledge than was to be found in other medical schools, or that our doctors were more advanced in therapy? I don't think so. But if I ask myself what it was that made Vienna the Mecca of Medicine I venture to presume that this lay in the whole attitude of the physicians themselves, who reflected the general atmosphere of artistic culture which pervaded the city. This atmosphere conferred upon everyone who settled there its own particular stamp,—that of intellectual and artistic splendour. But there was also another factor which should not be overlooked and which cannot be sufficiently emphasised, namely, that the medical school of Vienna was created, not by an Austrian, but by the Dutchman, van Swieten, the pupil of Boerhave. These two men were called to Vienna, and it was they who laid the foundation of its great school of Medicine,—a circumstance, it should always be borne in mind, that accounts for the fact that a large number of our most prominent clinical teachers have always been called to Vienna from other countries. This it was that conferred upon the Vienna medical school that attitude of openmindedness and receptivity which has always characterised it. As a consequence intellectual in-breeding has been carefully avoided, with its attendant evil of narrow exclusiveness. On the contrary, there has always prevailed a free intercommunion of thought and intellectual reciprocity among the various personalities in this department. Their observations, their experience, their skill brought a continually new breath of life and inspiration. In exchange the foreign doctors themselves became imbued with the Viennese 'timbre' and outlook on life. This flexibility of intellectual co-operation must therefore be considered as the main factor in the building up of this unique Viennese atmosphere of super-nationalism. I am prompted to quote the words of Para-

celsus: 'All kinds of knowledge are not confined to the fatherland but are scattered throughout the whole world. They must all be brought together, sought and found wherever they exist. No one's master grows in his own house, nor is one's teacher found behind the stove.'

A young student of Medicine is unable fully to appreciate the innumerable assets at his disposal. As he grows older and more mature he can better realise his great indebtedness to all the experiences of his youth and in particular to the distinguished masters of learning under whom he was privileged to study. But the full realisation of this can only come to one, perhaps, who has been compelled to break all ties with his former life and to build up a new existence under strange conditions and in an entirely new environment. At such a time we do indeed greatly need reflection and recollection, for the reinvigoration of our spiritual life. Tradition cannot be thrown overboard, for tradition is part of our being.

I should like to recall some of my personal experiences, in homage and gratitude to my teachers.

It was my good fortune to begin my medical studies during the first decade of the new century at a time when the Vienna Medical School still bore the impress of the great surgeon and artist Billroth and the famous clinician Nothnagel. Billroth was called from Zurich, whilst Nothnagel came from Germany. With the advent of Nothnagel there started the second period of the medical school of Vienna, and on the occasion of his inaugural address he conferred upon it its distinctive ethical stamp by the famous words which have veritably become the motto of the Viennese school, 'Nur ein guter Mensch kann ein guter Arzt sein.'<sup>1</sup> This attitude became the *Leitmotiv* of his medical clinic and of the future generation of physicians, for these words of his were immediately taken up by his great colleague Billroth who became the exponent of Viennese surgery.

In this connection I think it well to add a few words about the structure of the medical institution in Vienna, which differs in principle from those of the Western countries of Europe. It should be stated that all the clinical schools in Austria were parts of the universities and were fully supported by the Government. That was the reason why the directors of the clinics in Vienna, Prague, Graz and Innsbruck were always appointed by the Emperor, and after the abolition of the monarchy—by the Government. In

<sup>1</sup> Only a good man can be a good doctor.

Vienna there were three medical schools, called the Clinics for Internal Medicine, which were a part of the University. They were responsible for the instruction of all students in Internal Medicine. Nothnagel was the Director of the first medical clinic, whilst the head of the second was Neusser, a Pole. Surgery was taught in two clinics, the first under the leadership of Billroth, the second under Albert, a Czech.

Nothnagel was a great clinician. He was a master in diagnosis and in the most subtle elaboration of clinical observations. Moreover, he was a great teacher and a painstaking student of all medical literature. His clinic was famous for the high skill attained by all his assistants. Nevertheless, he fell short of genius, lacking the intuitive faculty which was so pronounced in Neusser, the head of the second medical clinic.

Neusser was unique in every way. He was an artist through and through, and possessed a genius for diagnosis, which was based on artistic intuition. His medical knowledge was stupendous, and he was strikingly influenced by the great French School to which he always adhered. He was famous for his interpretations and elucidations of the most insignificant symptoms, for it was just these symptoms which often supplied the clue for his skilful diagnoses. Neusser was a Pole and a remarkable pianist with a predilection for his fellow-countryman—Chopin. Indeed he was famous for his playing of Chopin. Many anecdotes are recorded of him in this connection, and patients had very often to wait for hours after their appointed time, or he would even decline to see them at all, as he refused to be interrupted in his playing. But his skill as a diagnostician became legendary, for as soon as he had entered a room he was able to establish the most difficult diagnosis. 'An illness should be smelt,' he would say. But his lectures were quite above the heads of his students, so that from this point of view he could not be called a good teacher. Nevertheless, his lecture-hall was always crowded with general practitioners. In his private practice he was equally exceptional. He not only refused to accept a fee, if called to a patient who he felt was unable to pay, but very often he would even spend his own money on needy patients. He was a consultant of the Emperor, and there was no difficult case in any part of Europe upon which his opinion was not sought.

After Nothnagel's death von Neusser supported the appointment of Carl von Noorden, insisting that he be summoned from Frankfurt a/M in order to become Nothnagel's successor. So the Emperor Franz Josef appointed Carl von Noorden to be the

Director of the first Medical Clinic of Vienna. Neusser was aware of the fact that metabolic diseases were rather neglected and there was no doubt that von Noorden was the leading authority of Europe, not only for diabetes but in the whole domain of metabolic disorders. Noorden's knowledge of chemistry, experimental pathology, and nutrition was stupendous.

At his death Neusser was succeeded by von Ortner, his most prominent pupil, who in the meantime had become the Director of the Clinic at Innsbruck. Von Ortner, a typical Austrian, was the exact opposite to Neusser. Although certainly not a genius, he combined the greatest diagnostic skill with enormous therapeutic experience and a stupendous memory. I never knew a physician who was more painstaking in his examination of a patient, because he had learnt from Neusser to regard the smallest symptoms, neglected by other diagnosticians, as infallible guides for his diagnosis. This man was indefatigable, for after ending his consultations and clinical duties he would work at his desk until 1 or even 2 o'clock at night. But however tired he might be, however poor the patient, he never refused his help, because the words 'I cannot' did not exist for him.

Ortner was a true teacher and every general practitioner could learn from taking him into consultation. Although his mentality was quite inartistic he possessed a remarkable faculty of medical intuition.

Von Noorden was a totally different type of man,—very reserved and aloof in his bearing and a most competent organiser. He was the first clinician to recognise the great importance of Biochemistry in modern Medicine. He introduced Dietetics as the main factor in the treatment of various diseases. Although he lacked the artistic and intuitive gifts which were so characteristic of the Viennese clinicians, such as Neusser and von Ortner, von Noorden's great merit was to have created the modern Clinic of Internal Medicine, which developed from his experimental work, and to have clearly realised that Medicine must be regarded as a branch of Biology. Von Noorden was the first clinician to make Therapy his chief aim, and he must accordingly be designated as the founder of the therapeutic school of Internal Medicine. Anticipating the vital rôle to be played by Biochemistry, he set aside a whole floor for laboratories exclusively in the new clinic which was built from his design. Upon visiting this clinic one had the impression that he was entering an institute of chemistry or bacteriology. This medical clinic still ranks as a masterpiece of planning and was recognised as such by no less an authority than Sir



William Osler. After a visit to von Noorden's clinic this distinguished English physician wrote:

'I had a "Queen of Sheba sensation" on visiting the first group of the new clinics of the Allgemeines Krankenhaus erected at Government expense,—*the most perfect of their kind in the world*, well worthy of the founder of the Vienna school,—buildings to make one despair of private institutions.'

Von Noorden did his scientific writing during the week-ends, at which time he refused to see any patients, or to be called into consultation, however urgent the case might be. His private practice was quite unique. So great were the demands for his medical advice that new patients had to wait many weeks before they could obtain an appointment.

He was absolutely uncompromising and always adhered firmly to his convictions. He admired personal courage, welcomed all new scientific ideas and supported every type of research work. I personally feel deeply indebted to this great man who stood firmly behind me when I opposed the prevailing view of the medical schools that skin diseases were merely local disorders; and when, as a result of my own investigations, I automatically came into conflict with the representatives of my own special field of Medicine, von Noorden boldly broke a lance on my behalf, as I will show later.

It can readily be understood that it was the simultaneous presence of so many remarkable and contrasting types and personalities that conferred upon the Vienna Medical School its fascinating character of distinction and originality. I personally was privileged to attend the lectures of von Neusser and von Ortner, to see men like the great Strümpell, to work as an assistant with such an outstanding neurologist as Professor Frankl von Hochwart, a close friend and former assistant of Nothnagel; and last, but not least, I was eventually brought into close touch and collaboration with Carl von Noorden himself.

To-day, in recalling my impressions, I am overcome by a sense of awe in the realisation of what greatness was represented by these outstanding figures. Most truly may this epoch be called, in the words of Stefan Zweig, 'The World of Yesterday'.

I am sure that no one who has ever seen the waiting-room of a consultant like von Ortner or von Noorden can imagine the special character of such a place. It was always crowded with patients from every country of the globe.

Unlike the English custom according to which one waiting-

room is shared by a number of consulting specialists, in Vienna the waiting and consultation rooms were usually connected with the physician's private apartments. As a result, upon entering the waiting-room the patient immediately sensed the distinctive *cachet* of the specialist he had come to consult. This from the very outset served to invite confidence and expansiveness, for every physician strove to establish direct and harmonious relations with his patients and to be considered, not only their adviser, but their personal friend. As the majority of the Viennese practitioners were, as I have said, greatly interested in art, music and every form of culture, they usually met their patients at the concerts and other places of cultural gathering, and this in itself helped to promote a closer personal relationship. I should like to cite one incident in illustration of this. Wenckebach, the famous cardiologist (who became the successor of von Noorden when the latter returned to Frankfurt), was very musical and attended nearly every concert. One evening he caught sight of one of his patients who, he noticed, was very agitated and deeply affected by the music. The next morning Wenckebach telephoned to this patient and invited him to come and see him. Embarrassed by this request the patient asked the reason for this sudden and unexpected summons. Thereupon Wenckebach, with his characteristic *gentilezza*, very kindly replied: 'Having noticed last night how much music moves and excites you, I wish to guard you against your high blood pressure by giving you a suitable sedative to take before going to a concert.'

I could quote many similar instances, but this example will serve to give an idea of the humanitarian spirit which underlay the medical profession. And if such an atmosphere of personal sympathy and cordiality radiated from the consulting-room of the specialist, it was, of course, even more marked in the case of the general practitioner, or family doctor, as he was called in Austria. If in this connection I mention the name of one of the foremost practitioners of Vienna, none other than Dr. Breuer to whom I have already referred in my chapter on Freud, it will readily be understood in what high esteem the general practitioners were held. They were first-class diagnosticians, always fully informed about recent advances in Medicine, but ever ready to call in for consultation the appropriate specialist. And how interesting were some of these consultations! For the family doctor would never accept the verdict of even the most distinguished specialist, unless he himself was fully persuaded. Moreover, he would not hesitate to call in three or four different specialists in succession until quite

satisfied that the opinion given was the correct one. It was the profound realisation of these conditions which existed in our old Vienna that induced me to write the following letter to the *Sunday Times* of December 7th, 1943:

Dear Sir,

Will you permit me to reply to the article which appeared in your last issue of the *Sunday Times* entitled 'The Medical Service' by Henry S. Souttar, which he wrote in his capacity of 'late Chairman of Council of the British Medical Association'?

Referring to the family doctor and the voluntary hospitals, Dr. Souttar states that 'nothing like them ever existed in Continental countries'. I should like to know what are the facts upon which such a statement is based, because I wish most emphatically to contradict this assertion.

The high esteem enjoyed by the general practitioner ('Hausarzt' or family doctor) was the result of his superb skill and was traditional. The family doctor in Vienna, Prague, Budapest, Berlin, etc., played a most vital part in Medicine. He attended the same family for successive generations and became, not only a trusted medical adviser, but a close friend who was called in to share all the family's joys and sorrows. When, for instance, the famous Professor Wenckebach was appointed Director of the Viennese Medical Clinic he often emphasised the fact that he had never learnt so much as he did from the highly skilled practitioners in Vienna.

As to the writer's statement regarding voluntary hospitals, may I mention that these have long existed on the Continent? There was the Viennese Policlinic, founded by Princess Metternich, which became one of the foremost schools of Medicine in Europe. Another type of policlinic, based on the same principle of voluntary hospital, was subsequently established, and here the world-famous ear specialist, Prof. Heinrich Neumann, as well as the great throat specialist, Prof. Hajek, attended all the poor patients, before these great men were appointed to the positions of Directors of their respective University Clinics. And what about the hospitals founded and supported by Baron Rothschild? In all these institutions the poor were attended by the best specialists.

The great university clinics on the Continent were, of course, supported, not by voluntary contributions, but by the Government, and that is why the Government could appoint the best clinicians from all over the world as Directors of the respective clinics. That is also the reason why these clinics became so famous as medical schools and were visited, not only by patients, but by doctors and medical students from all parts of the world. Every person, however poor, could have the benefit of being examined and treated by these leading clinicians.

But in spite of their obligations toward the Government these clinicians had naturally the right to practise privately, and this is a very important point. Private practice has furnished and contributed

experiences that these clinicians could never have gained in hospital practice, and these were utilised for the benefit of their medical students, as well as for the hospital patients. Every clinician stressed the point that only in private practice was he able to study an illness from its very beginning, for the persons resorting to the hospitals usually showed only advanced stages of these same diseases. It was therefore realised that it would be a great mistake to limit the work of hospital clinicians to institutional work, as thereby their experience would inevitably become one-sided.

May I quote in conclusion a statement made by the great Sir William Osler? After visiting his friend Professor Wenckebach in Vienna, he wrote:

'I had a "Queen-of-Sheba sensation" on visiting the first group of the new clinics of the Allgemeines Krankenhaus, erected at Government expense,—the most perfect of their kind in the world, well worthy of the founder of the Vienna school,—buildings to make one despair of private institutions.'

I am, Sir,

Yours faithfully,

Dr. E. Pulay (Vienna).

The gentleness and consideration with which our medical teachers treated their poor patients at the clinics will remain an unforgettable memory. This quality was a powerful influence in shaping the characters and standards of the young students.

At the time when I studied in Vienna, as previously mentioned, the whole medical school bore the stamp of Billroth's personality. This great man was not only the foremost surgeon in Europe, but also a great artist, being an excellent pianist and first-class musician. His knowledge of the history of art was extraordinary; indeed he was a fascinating personality. His friendship with Brahms and many other artists and literary men conferred a distinct character to the whole medical school, and this naturally served as a great artistic stimulus to all the students. Indeed the opportunities for cultural development were illimitable, and it was a priceless privilege for a young man who spent his entire day in the lecture-rooms or laboratories to be able every evening to relax in the enjoyment of the highest artistic performances. During my student days the opera and the Viennese Philharmonic Society boasted such leaders as Gustav Mahler, Schalk, Bruno Walter, and later Weingartner. Or in the theatre, artists like Kainz, Lewinsky, Sonnenthal, etc.

Looking back, it seems incredible that a young student was able to enjoy the greatest symphonic and operatic performances for the modest sum of sixpence!

But there is another aspect which I wish to stress. It concerns two matters: first, the position which the medical profession or, in other words, the physicians occupied in society, and secondly, so-called 'medical etiquette'.

In Vienna the medical profession was highly esteemed, and there was never a big party or reception, either in private homes or at the embassies, to which doctors were not invited. More than this, it was always regarded as a particular privilege if these invitations were accepted by leading physicians. This was the case, not only in Vienna, but also in Prague, Berlin, Budapest and Paris. As a result there was never any aloofness or lack of intimacy between a doctor or specialist and his patients. At some of these gatherings the most interesting discussions would take place. It is this whole attitude which is undoubtedly reflected in the prevailing medical etiquette. But actually there is no profession which calls for such a high degree of trust, nor one in which personal independence, conviction, an uncompromising stand, quick decision and action are more essential than in Medicine. Nobody, therefore, can or should stand between a doctor and his patient. I am of the firm opinion that a patient must have the right, not only to choose his doctor, but to consult as many different physicians (specialists) as he desires. For it is he who is in need of help and every consideration. The consultant's sole responsibility is to give the patient his advice, in accordance with his personal opinion. No kind of compromise should be permitted in this matter. I accordingly most emphatically deprecate the existing so-called 'medical etiquette', for I hold it to be entirely contradictory to the true ethical standards which should prevail and for which I plead.

Furthermore, I consider it absolutely wrong that a patient should be prohibited from consulting a specialist without having previously obtained the sanction of his general practitioner to do so; and also that the consulting specialist should be forbidden to give his opinion direct to the patient. There should be no such obligation in these matters. Neither should a physician be compelled to disguise his opinion merely because it happens to conflict with that of some other doctor. It is the patient who must be safeguarded, but never the prestige of any physician. And so I wish to emphasise again that it was precisely this attitude of mutual confidence between doctor and patient, associated with a complete spirit of freedom of action, including the liberty to seek the opinion of any other doctor, that conferred upon our Viennese medical practice its high ethical superiority. Doubtless this was

the reason why Vienna became the birthplace of Psychoanalysis and of Individual psychology. It was certainly not due to mere coincidence!

However, it should not be imagined that everything in Vienna was perfect, that it was ideal in every respect. On the contrary, it was a very difficult *terrain*! A man had to fight hard in order to secure his position; the jealous rivalry which prevailed among the various physicians and specialists was boundless! . . .

But despite all this it was inevitable that with such a cultural and educational background and with this intimate contact with patients and students from every part of the world, Vienna should have maintained her high level of excellence. The whole spiritual atmosphere of the city is so clearly revealed in the letters of Billroth that I cannot do better than to quote from some of them. Not only do they reflect his deep respect for the work of others, but they also reveal his profound interest in all human concerns and achievements. They show his enthusiasm, his artistic mind, his profundity, his capacity to enjoy and to admire; at the same time they give a glimpse of his daily work and the depths of his feelings. Here we see, not only a surgeon, a physician, but an artist in the truest sense of the word. These letters will remain as a document in the history of man.

*To Dr. Gersung.*

London, October 2, 1886.  
Saturday evening.

Dear Friend!

Yesterday morning we breakfasted with Richard Lieben, and he spent the whole day with us. In the morning St. Paul's cathedral, which is not only a copy, but a *pendant* of St. Peter's in Rome, although its interior is less gorgeously decorated. We arrived in time for the early hour of the high church service, with its Catholic ceremonial and much more beautiful music than is found in Rome. The effects of the excellent boys' choir in the lofty vaults of the cathedral was one of positive enchantment, even transfiguration.

Next, to the National Gallery, which possesses a first-rate collection of pictures. This collection is of recent origin and has for the most part been contributed by private individuals from their own houses. The Dutch and Early German masters are so well preserved and wonderful in their fresh colouring that we had the impression that we were seeing for the first time Teniers, Ruysdael, Hobbema, van Eyck, Rubens, Holbein, Memling, etc. These pictures seem to have been just taken down from their easels and there is nothing old-fashioned about them. Else was particularly delighted with them. I must confess that this gallery also impressed me tremendously, but I am wondering whether

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the effect upon Else may not be lessened by the Louvre in Paris which, after Florence, contains the greatest masterpieces in painting.

After regaling ourselves with oysters, lobsters, sherry and champagne (on this occasion I did not attempt to count the cost) we drove to the Colonial and Indian Exhibition. This was most interesting, but thanks to a lucky chance, this enormous exhibition has been installed on the site of a previous mediæval exhibition which still retains portions of the reconstruction of some XVth-century London streets. These exercised such a bewitching effect on our German minds that we hardly glanced at all at the treasures of India, Ceylon and the Cape of Good Hope, but spent our time in walking around Old London.

Dinner in the hotel, followed by a charming and musically delightful comic opera, the 'Mikado' (by Sullivan). Glancing at Else after the second act I noticed that, in spite of all the champagne, she was quite exhausted. However, she was enjoying herself too much to be able to leave the theatre and it was midnight before we got to bed.

Although Else slept like a top all night until 9 a.m. she refused to stay in, although she was obviously somewhat worn out. So to-day we visited the Tower with its collection of armour and Crown Jewels. But the chapel in which lie all the victims of Richard III interested Else much less than did the drilling of a company of Scotch soldiers with their bagpipe music. From there to the British Museum, where we cast only a cursory glance at the frieze and metope of the Parthenon in the Elgin Room.

Next, half an hour by train to the Crystal Palace in Sydenham, where can be seen the whole world and seven villages. To rest us there was fine concert music, in particular that given on the gigantic organ of the Händel auditorium. Here by chance we again met Lieben. What a place London is for running across people! The weather was wonderful, and we were torn between the desire to enjoy more of the scenery and to look at the marvellous reconstructions of the civic architecture of all the ages: living rooms, halls and houses from the period of Ancient Syria to our own time. Here more than anywhere else one really feels enchanted. The reconstructed Pompeian house attracted us in particular.

Back to London. An hour's rest, followed by dinner and one act of what they called 'Goethe's Faust', in order to see England's most famous living actor, Irving. Unfortunately we arrived during the Gretchen scenes which were so horribly travestied that we were quite disgusted, and Else went to bed as early as 9 o'clock. I myself sought recovery in the smoking-room with a copy of *The Times* and then went up as well. Else was already sound asleep. Now it is midnight, but you have not finished with me.

I don't allow Else to do any walking; we always drive, even up and down in the hotel. Else keeps up well and even physically she is not exhausted, but she is sometimes overwhelmed by the magnitude of the impressions. To-morrow (Sunday) we are going on a quiet excursion

to Richmond with Lieben. On Monday we still plan to see Westminster Abbey and the South Kensington Museum at leisure, leaving Tuesday for a last visit to the National Gallery.

On Wednesday we shall return to cosy little Paris, by a delightful trip of 8 hours. Thursday and Friday in Paris will be confined to the Louvre, Luxemburg, Hotel Cluny and a drive in the Bois de Boulogne. On Friday evening we leave Paris and arrive in Vienna on Saturday evening, according to schedule. Should Else particularly wish it, I may allow her an extra day for Paris. However, as it is my experience that after 10 to 12 days of continuous highly stimulating impressions it is impossible to take in anything else, I think we shall keep to our original programme.

Sunday morning,  
October 3, 1886.

The sun woke me up at 6.30. The Thames and part of London lie before me in a wonderful light. The bridges and dome of St. Paul's are particularly impressive. Else is still fast asleep, she has not yet seen London like this, and in half an hour all will again be enveloped in mist. We shall have another beautiful day. Among my acquaintances here no one remembers ever having had such fine weather.

Please tell Christel not to be annoyed if Else does not write herself. To-day she is feeling better than yesterday, and she is getting used to seeing daily the most marvellous things with equanimity. What worries her most is that here, as in Switzerland, most of the 'foreigners' are English.

Best greetings to yourself, Bertha, Christel, Martha, Helene, Pufi and everyone.

Yours,  
Th. Billroth.

*To Dr. Johannes Brahms, Vienna.*

Paris, October 8, 1886, p.m.  
More correctly, October 9, 12.30 a.m.  
after the theatre.

Dear Friend,

I have deeply regretted that I did not persuade you with more insistence to share this trip to London and Paris. The thought of being able to include in one visit all the characteristic features of England and France, which are of course centred in their capitals, is as foolish as the idea of trying to exhaust Italy in a single visit. We Germans are ultra-conscientious and slow in such matters, but although we have taken it easy, we have seen all the most important things with the greatest thoroughness and comfort.

Fifty years ago I was in London for a month, but saw only hospitals and surgeons. On this occasion I wanted to see nothing but the treasures of art and nature, and from both these angles London surprised

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and even enchanted me. I was prepared, in this city of four million inhabitants, with its 25 city stations and its trains above and below the ground, to find much that was both impressive and interesting; but I never expected to find so much that was lovely and even surpassingly beautiful.

The National Gallery and Westminster Abbey, where all the great men of England are found either in tombs or beautiful monuments, where the many kings and princes of England whom we know chiefly through Shakespeare, rest in peace beside him and other heroes of Science and Art,—this in itself merits a visit to London.

And what shall I say of Paris? That is a most comfortable place. Of course you must also be lucky in the selection of your company. Frau Wilbrandt, Lenbach, Munkaczi and others are most entertaining people to meet on one's travels. Else thoroughly enjoyed participating in the crazy bohemianism of these days.

As I have so often scolded the lazy Viennese students, I cannot fail, as a Professor, to promptly resume my clinical activities on Monday. In St. Gilgen, London and Paris I have imbibed so much of the beauties of nature and art that now I am glad to return again to the dry business of teaching.

Heartiest greetings,

Yours,

Th. Billroth.

*To Dr. Mikulicz (Billroth's assistant).*

Vienna, June 17, 1879.

Dear Mikulicz!

Many thanks for your letter from London. I am delighted to hear that you like English Surgery and the English surgeons. I think that Lister is a most delightful man. I had feared that he was bearing me a grudge because I did not immediately and wholeheartedly enter into his ideas and methods. But he clearly reveals his exceptional nature and the fact that he is so great an expert in his own field that he can patiently await the judgment of others. Will you kindly hand him the enclosed letter in which I have thanked him for his kindness in welcoming Wölfler and yourself.

It would be nice if you could also go to Edinburgh and Dublin. It is a long time since I heard anything from those parts. Dublin is a wonderfully beautiful and interesting city, and the Irish are particularly hospitable and kind. MacCormic will be able to furnish you with introductions for Dublin, and Lister for Edinburgh. You must not return before the first week of August. H. insists that, in accordance with the conditions of your fellowship, you may not return before the full expiration of the six months period. You can rely upon the fact that travelling in Great Britain is very expensive and that in all advanced countries the holidays start at the beginning of August. Should you be in need of money don't hesitate to write to me. I will gladly advance

you for ten years or more as much money as you may need or want. No special news from here, apart from an almost total absence of ovariotomies!

Yours,  
Th. Billroth.

*To Dr. Johannes Brahms in Vienna.*

Abbazia, January 6, 1886.  
In the evening.

Dear Friend!

I have just finished reading Schumann's letters, and although it is already late and the lamp is growing dim, I cannot refrain from telling you at once how deeply this intimate biography has affected and moved me. You wrote advising me to read first the letters to Clara. But I am incapable of doing such a thing. I have, unfortunately, written too many books myself and have thought too deeply about the form of each one of them not to consider that it would be a terrible thing if anyone should start reading my books from the end. I even believe that if I had published a dictionary I should feel hurt if anyone were to begin by looking up something beginning with the letter 'Z'. Once I had finished writing anything I always considered the Introduction the most important part of the whole book.

But you are right. The Schumann whom we know is revealed at his best in the letters to Clara, and although we can imagine Clara without Robert, we cannot think of Robert without Clara. But the point which chiefly interested me was to note the manner in which Schumann finally became the man he was. In the life of this soul it is most remarkable to see the transformations which took place in Schumann's character once he had decided to dedicate himself entirely to art. As a member of a Heidelberg student corps he gives one the impression of being a dashing man of the world with a flare for delightful frivolity; but later he becomes so serious and thoughtful, once he has submitted his whole life to the world of fantasy. As a student we see him affect a smart worldly style of living, with only an occasional submersion into the inner life; later we note outward reserve, with a rich, active life of the spirit, at which stage he shows unmistakable resemblance to Jean Paul, the only difference being that the musician Schumann finally attained classical perfection of style, a thing which Jean Paul never realised. I also note a certain resemblance to Weber, who during his youth, handicapped by a bad education, certainly dived deep beneath the surface of external gaiety, but only later, after he had devoted himself completely to art, showed evidence of profound emotional feeling.

The activities and ramifications of my brain are unfortunately so widely interconnected that when one point is touched a number of electric bells immediately start ringing. So, for instance, I am unable to silence the constantly recurring question: How can an artist recognise that he possesses originality, and the significance of his originality?

Do not most artists (I except the poor devils who pursue Art as a means of livelihood and *only* for that reason) believe that they are creating something new? And are not most of them self-deluded? Is it not primarily the public (in the highest sense of the word) that establishes his originality through comparison with others? This idea will sound terrible to you. Nevertheless, if to-day an artist creates through inspiration and out of a full heart and always says and writes: 'I feel that I am different, that I have something new to offer; it is you who are blind!'—and if this continues for many years without anyone sharing his opinion, he will simply be considered a poor fool. It is exactly the same thing as when a poor mentally deranged person imagines that he is a king, a prophet, or a saint. First there must be found a few, then more, and finally many understanding persons. In short, a public must be found which shares his opinion. Of course it may happen that a highly original creative artist is not recognised for what he is, if he should die early; but provided he has been able to work for a number of years, his individuality will not fail to be recognised. Such exceptional cases may encounter difficulty of recognition, if the artist does not follow the current trend of the times; but he will nevertheless ultimately be recognised at his true value. Of course it also depends upon whether this individual art form is a beautiful one, which promises to serve the development and promotion of true art, or whether it is destructive in nature. The answer to this question will determine whether that particular artist is to be accorded a place in the history of art and what it will be. Moreover, there exist in art certain characteristics, as seen in Architecture, which affect form in its essence and entirety, and others which only apply to the decorative element.

Schumann says: 'Doubtless only genius can recognise genius.' That is certainly true, generally considered, provided the genius is well acquainted with all that has preceded him. In other cases this truth might be questioned. I do not know to what extent Schumann is to be considered a reliable editor and critic. He was certainly always sincere in what he said, although he may often have been influenced by such factors as mood and personality. In such matters I should be inclined to consider him not entirely undeserving of criticism with respect to a little matter wherewith he reproaches Clara on one occasion.

Only you artists can enlighten us with regard to this point.

What makes this matter so much more difficult is the fact that in the course of time human emotions undergo continual suspension, fluctuation and change. Speech, customs, and increased recognition of natural phenomena, etc., exert a constant influence upon the intensity and degree of our emotions, as well as on our expression of them and the manner in which they react on us. And if finally I consider what may be the value of an exact analysis of all these factors in furthering in us a genuine response to art, I should be compelled to set this at a not very high rate. The joy proceeding from the appreciation of all the processes in Nature and in ourselves—for after all we too are a part of

Nature—is undoubtedly a beautiful thing; but my contemplation of Beauty through the imagination makes me much happier. Our vanity is satisfied by the ability to know and do many things, and so we can feel very important on this small planet. But if in exchange for this I were compelled to forfeit the faculty of vision, longing and rapture, I should prefer not to live any longer. The same applies to you, doesn't it? . . .

My lamp is still burning faintly, so I will just mention Grimm. From Robert to Jacob is but a short step. I often saw old Jacob Grimm in Berlin. I distinctly remember his head, as also those of Rauch and Alexander von Humboldt, the physiologist Johannes Müller, the physicist Gauss, and the chemist Wöhler. They were all great men of learning, not only by virtue of their profound understanding and knowledge, but also through their powerful imagination. *If an investigator is unable to visualise what he wants to discover, if from the outset he has not some idea, however vague, of the significance of that which he wishes to find, he will remain a mere drudge of Science and will never become a master.* I have never known a great investigator, whether from my personal acquaintance or through his biography, who was not at heart a kind of artist, endowed with a rich imagination and a childlike nature. So here I have reached my favourite hobby: Science and Art draw their inspiration from the same source.

That is enough. Good night!

Yours,  
Th. Billroth.

To Joachim.

Vienna, Jan. 20, 1890.  
At night.

Dear Joachim!

Even at the risk of boring you, I cannot refrain from telling you what a profound enjoyment you afforded me and many many other people this evening. However greatly I admire the incredible endurance of your technical virtuosity, I am nevertheless always powerfully and magically drawn by the nobility of your pure artistry and the musical beauty of your interpretations. What can I say to you about the supreme perfection of your renderings and your exquisite style that you have not heard a thousand times! At certain places there is a spirit of musical radiance in your tones which is capable of transporting the listener into an almost abstract supersensual state. 'The tears well up', but earth does not have us again, for 'we see the heavens open'.<sup>1</sup> The eternal youthfulness of Beauty, as we dream of it, appears at such moments to be a part of ourselves.—We experience the purest, most beautiful, supreme joy. Freedom!—Light!—Extasy!

So I thank you a thousand times!

<sup>1</sup> Quotation from Goethe's *Faust*.



To-morrow I shall joyfully resume the daily routine of my professional work, in anticipation of the pleasure of listening to you again in the evening.

If you could induce our friend Brahms to join you on Wednesday in a trio or quartette, say, in the house of Ehrbar, please think of me.

With my heartiest greetings and apologies for this volcanic outburst of my innermost emotions,

Yours,  
Th. Billroth.

*Letter to Brahms.*

Shall I really send this letter, filled with woe, to you?  
I hesitate; I will, I won't, and finally I do.  
So oft we shared our joyous moods—you'll not complain,  
When now the sunny times are gone—and take the rain.  
You, whose melody the sun to rain imparts,  
And makes it sound and sing like sun in others' hearts.<sup>1</sup>

Vienna, March 5, 1890.

11.30. p.m.

This was a very crowded, rather tiring day—as usual. Everything on time! I awoke early on account of a wound in my finger, which had become infected through contact with pus. But I am used to that and shall soon get over it. Then eternal bell-ringing! I was hardly even permitted to breakfast in peace with my wife and children. Messengers from hotels, asking for consultation appointments; the Secretary of the *Rudolfinnerverein*, asking for signatures, etc. Next, visits to private patients operated yesterday; then to the clinic. Assistants, operators, orders from the Board of Directors, everybody wants something. Good gracious, it is already twenty minutes past ten! Hurry! Into the auditorium. Two hours of teaching and operations. Hardly have I left the operating theatre but I am assailed by more people.—Finally home! Twenty minutes for lunch. Then to a very severe operation lasting over two hours. Bold precaution, ultimate success! All goes well. Quickly two glasses of brandy! Home. Six patients, some trifling cases, some incurable. Lies, consolation lies! A quarter of an hour for tea with the family. Now again 4 patients to visit. Home! Half an hour's rest. What a joy! Finished reading the book by Widmann. Then to the Renaissance concert. That was a great pleasure! One and a half hours of peace listening to restful music. I thought the performance excellent. The chorus was wonderfully pure. Walter really noble and great; I have rarely heard him to better advantage. Here and there sentimental in the modern style, at other times a little overdone. But on the whole he can't be surpassed by *any* modern singer. Very select audience, attentive, emotionally responsive. All so compressed, short and beautiful! Now back home in a good mood and finally some rest. Very cosy

<sup>1</sup> *Regenlied* by Brahms, Op. 59, Book 1, No. 3.

supper with the family. Now six important business letters. At last 'Enfin seul'.

So I have had to fight for every hour in which I could read Widmann's delightful book,<sup>1</sup> and so I must fight for the time to thank you for having sent it to me. This book has furnished me some very happy hours. With few exceptions I know all the towns and scenes which he mentions. For that after all is necessary in order to be able to thoroughly enjoy the book. The author possesses a happy nature for which I am inclined to envy him. But he must also be a keen observer and an excellent psychologist. And with all he possesses a delightfully natural sense of humour. His style often reminded me of Hanslick.<sup>2</sup> How happy are those persons who are able to set a limit for what they wish to attain and so can expand comfortably within these limits. For in the end happiness lies in subconscious resignation.

Unfortunately that was not given to me. I am an old man, but every boundary is unbearable to me. A longing for something unknown even to myself disturbs me in the peaceful enjoyment of life. It is too stupid! But I can't change it.

The other day the last phrase of your C minor symphony worked me up tremendously (similar to the third part of Schumann's *Faust*). Of what use the perfected, clear beauty of the chief *motif* in its thematically closed form? At the end the horn comes yet again with its wild cry of yearning, as in the introduction, and everything vibrates with longing, extasy and supersensual bliss!

You said the other day that nothing was more lovely than to employ the fresh early morning hours in reading some beautiful profound book. That made me think: I, poor thing, how seldom can I do that! Something that you, enviable man, can have every day! Formerly it was different in my case too, for I had more tension. It is the garland of youth that I seek, the longing to find myself. That sounds ridiculously arrogant, but you will understand it. My life, my power, my work has been shattered into a thousand splinters. My strength decreases, but people's claims on me are constantly growing. Formerly when such a mood overcame me I also resorted to writing poems, and now I cannot resist the temptation of writing you one on the opposite page.

Now I will lie down on my bed resigned and exhausted, but often for many hours I long for the embrace of Morpheus!

But enough of this chatter. Believe that I am as always

Your affect.

Th. Billroth.

Out of this atmosphere of culture was born the glory of the Vienna Medical School, to be a representative of which must always be regarded as a supreme distinction.

<sup>1</sup> J. V. Widmann, *Beyond the Gotthard. People, towns and landscapes in Upper and Central Italy*. (Frauenfeld, J. Huber, 1888.)

<sup>2</sup> A famous Viennese music critic.

## XIV

## FUNCTIONAL PATHOLOGY IN MEDICINE

SOME short remarks are needed concerning our medical points of view. Since the last war medicine has not only advanced, but has changed fundamentally. Whilst twenty years ago a person was only regarded as ill if there could be found an anatomic change—that is to say, a change in the morphological structure, and all the other complaints which could not be traced back to such a morphological change were interpreted as neurasthenic in nature,—to-day we know that most of the symptoms are caused by disturbed functioning. Modern Medicine must strive to become preventive, as the prevention of diseases should be our main aim. But we can only become familiar with this subject if we have learnt to understand Constitutional Medicine. For the constitution must be the focus of our interest, and to understand the constitution we must understand functional pathology. We know that functional changes may take place without any structural alterations. Disturbances of the regulatory system are our main concern, and these are understood to-day as the result of our advanced knowledge of endocrinology; for we have recognised that the hormones are the central regulators of all the metabolic processes. But the functions of the organs can only be investigated by means of exact biochemical tests. If we analyse the functions and their derangements it is quite apparent that our attention cannot be centred upon any single organ only, but that we must necessarily consider the organism in its entirety. Only if viewed from a functional aspect are we able to deal with all the manifold symptom complexes associated with the various phases of life, in both men and women; for instance, diseases of puberty, of the menopause, disturbances due to infectious diseases or to any other kind of irregularity, and last but not least, to nutritional disturbances.

All these various functional disturbances can be successfully treated once they are recognised. This, however, cannot be accomplished by mere routine examination, but only with the help of all the laboratory facilities at our disposal.

This point is of importance in connection with our present task, viz. the treatment of the population of the occupied countries.

The impaired constitution of children must particularly be taken into account.

If we consider all the strains to which the people have been exposed we can realise how great will be the disorders associated with the pubertal and climacteric symptom complexes, which even under normal environmental conditions are so significant. But we must deal energetically with these and in particular with the climacteric symptom complex, because it is just the elderly people whose help will be needed in rebuilding the life of the future in these liberated countries. It should never be forgotten that it is just this generation which, with its children, are not only the witnesses of present-day events, but are also the bearers and transmitters of the old traditions of their countries.

The more advanced are our knowledge and clinical experience regarding allergic manifestations, the more do we learn to understand all these allergic conditions from an essentially biological aspect, namely, as phenomena of biologic intolerance. This intolerance can be manifested physically and mentally, and the treatment of these intolerance manifestations will be one of the main tasks with which the physician will have to deal. Allergic reactions are caused by intolerance, which can only be understood if one is familiar with endocrinology and the treatment of functional disturbances. Intolerance phenomena are to be understood as a constitutional feature. I cannot discuss this whole problem at this time, but as we have to reckon with a great prevalence of hypoglycemic<sup>1</sup> conditions, which might be termed 'a metabolic epidemic', we cannot sufficiently draw attention to this unique aspect of functional pathology. Only anyone familiar with the various symptoms caused by hypoglycemia, which can even lead to epileptic convulsions, will understand the importance of my demand that thorough examination be conducted along these lines. It should be emphatically pointed out that epileptic fits and cardiovascular disturbances, accompanied by spastic or by hypotonic conditions which lead to the various forms of spastic insult or to the symptom complex of peripheral collapse, are only too often a feature of hypoglycemia, but unfortunately these are at present still misinterpreted and regarded as a cardiovascular disease. How can we make a proper diagnosis if these patients are not properly examined? Therefore I suggest that all the hospitals and clinics must be properly equipped for this purpose by the installation of a clinical station for functional diagnosis. Only by so doing can we adequately deal with preventive medicine. The

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prevention of illness, by curing the functional disturbance, can be interpreted as the anticipation of an organic lesion. The constitution of an individual is the integration of the functions of all the organs. Constitutional Medicine is based on a profound knowledge of Functional Pathology because to treat the constitution of a person means to regulate the disturbed functions.

## XV

### NUTRITION

**A**FTER this war Europe will be in a state of great exhaustion, both mental and physical. Never before in human history has medical attention been so greatly centred on the mind-body problem, and this must become the focus of all our efforts. Exhaustion as the result of starvation and of all the mental shocks, sorrows and strains with which the people of the occupied countries are afflicted, needs our most pressing attention. Hence we must bear in mind that all suggestions regarding post-war relief apply to individuals who are exhausted in mind, body and soul.

To-day we know the extent to which the bodily condition influences the mental state, and vice versa. The mental state is closely interlinked with all the metabolic processes and can therefore be influenced by nutrition. It is also abundantly evident that even the severest psychic disorders, such as depression, confabulation, lack of concentration, loss of memory, can be favourably influenced by a proper supply of vitamins. The extent to which toxic conditions influence the mental state is well known.

To-day the whole nutrition problem must be envisaged from a new angle. As a result of our greatly increased knowledge of vitamins and minerals, we are to-day chiefly concerned with the quality of food.

In past years physicians have greatly overlooked the importance of nutrition in the realm of medicine, and if considered at all it was merely viewed from a quantitative angle. The caloric value of the foodstuffs was considered all-important. Vitamins as essential foodstuffs were unknown.

In the last war we were faced with an epidemic of a nutritional nature—hunger dropsy (Hungeredem). This was caused by under-nutrition, due to many causes. Other factors were lack of proteins, vitamins and minerals. At that time, however, we had no knowledge whatever of vitamins nor of the relationship exist-

ing between vitamins and minerals. Lack of proteins, potassium and calcium leads to an increased sodium chloride content within the tissues and to water retention. To-day we understand this pathological metabolic symptom complex since we have become familiar with the phenomenon of cell-permeability and its impairment. The inter-connection between disturbances of cell-permeability and transmineralisation is now well realised. Mineralisation depends upon hormonal control.

Any pathologic condition within the tissues is caused by and leads to disturbed vitamin and mineral balance.

## I. VITAMINS AND MINERALS<sup>1</sup>

Vitamins and minerals are not only regulators of normal metabolism, but they are indispensable as food. Minerals such as potassium, calcium, phosphorus and copper are to be regarded as 'inorganic vitamins'. They are rightly designated as 'protective foodstuffs'.

Vitamins are indispensable, and they constitute an essential, not an additional, element of food. Vitamins and minerals exert a curative as well as a protective function.

*Vitamin A* protects against infections and fortifies the mucous membranes. *Vitamin C* preserves the tissues against all kinds of inflammation and is needed as one of the most powerful prophylactics and therapeutics. *Vitamin B* protects the nervous system, the liver and tissues against all the consequences of infection from such diseases as typhoid, dysentery, diphtheria, as well as against the many post-toxic disturbances. But Vitamin B also increases resistance and efficiency. And in stressing the importance of Vitamin B I include all the Vitamin B complexes.

If we compare the conditions prevailing during the last war with those obtaining at the present time, it is quite apparent that we are to-day confronted by new and more dangerous conditions. Famine and mental exhaustion among entire populations, not only in the occupied countries, have to be taken into account, and therefore we must take all the necessary preventive precautions. For this reason we must utilise to the fullest all our knowledge and experience. Abnormal conditions call for abnormal measures.

<sup>1</sup> E. Pulay, *Nutrition and Victory*, 1941 (Wm. Heinemann).

II. FOOD AND THE MIND<sup>1</sup>

'The food question clears the way for the mind question, which then is exalted above the former, and the social question is dependent on both and conditioned by both.'

(Bircher-Benner.)

The construction and functions of the body provide an inexhaustible and astonishing subject of contemplation, and some understanding of health and sickness is indispensable to the student of human nature. But there is another side of no less significance for us than the purely physical processes of the organism; that part of us which knows, feels, observes, remembers, judges and desires, that part in which we encounter affection, instinct and emotion. We change from one physical state to another, from energy and effort to exhaustion and fatigue; even our consciousness has varying phases, vanishing in sleep and re-emerging in the experience of our dreams. In every one of us there exists the longing for things known and unknown. Unceasingly we enter into fresh relations with ourselves, with the persons and things around us, with our whole world, in a complicated play of mind and emotions which is constantly evolving new permutations and combinations. And it is through our mental attitude that our place in our environment is determined, the environment of which we ourselves are a part and a function.

Friendship and hostility come into being, standards of value are formed which lead to enthusiasm or indifference; we learn to distinguish between good and evil, creating in ourselves feelings of guilt, remorse, atonement, inspiration, intuition and imagination. And each and all of these conscious and unconscious notions are swayed by our varying impulses; the three prime impulses being the urges to eat, to propagate and to assert the ego. These three are the great factors in the development of all personality.

The three are unceasingly at work in us, even though we neither recognise nor feel their presence. Impressions and conflicts take place, decisions are taken or rejected, standards of value are set up, all without our conscious knowledge; for none of these occurrences within us can be seen or measured or weighed; their field of action is the mind. But the body reveals their presence, and from the signs which the body shows we may recognise the inner, invisible processes which lie behind.

<sup>1</sup> *Nutrition and Victory* (1941).

Fear and apprehension accelerate the heart-beats; ill-humour, vexation and anxiety spoil the appetite, while happiness and contentment promote it. The stomach, the intestines and even the skin react to mental excitation, as witness the sweat of terror. If it were generally known how much can be diagnosed from the skin alone, we should realise how accurately the skin has been called the mirror of the mind.

The misunderstood child, ill-treated by unperceptive teachers, trembles and begins to lie from fear, then becomes shy and secretive. Its guilty conscience makes it shy, uncommunicative, impudent and badly behaved; it loses appetite and refuses food. This state of affairs leads sooner or later to actual ill-health.

Every doctor knows to what an extent mental states influence the body in all its functions; evidence of this is daily available. And though it may seem at first sight a far-fetched conclusion, even sociology is not dissociated from health. Our mental condition and its physical effects actually determine our outlook on society.

In this connection may be mentioned a particularly interesting case recorded by Bircher-Benner. 'Mrs. S. suffered from digestive troubles and for many years vainly sought relief by means of all kinds of medicaments. She was a youngest child; her father died early from an affection of the lungs, and her mother was a permanent invalid, incapable of working. Consequently the girl, while still in her teens, was obliged to manage the household. Whenever she failed to run the house to their satisfaction, her brothers would ill-treat her. The result of this unhappy and loveless life was that the overworked and mishandled young woman projected her own dissatisfaction upon the world around her.

'One day, upon going out into the street, she heard the "Internationale" sung: "We struggle for the Rights of Men." The words made a deep impression, and she began to attend Communist meetings in the evenings, returned home late, and suffered further ill-treatment from her brothers. But in spite of this she continued to attend the meetings, where she found comfort and consolation. When she threatened to run away from her unhappy home, her brothers laughed at her and beat her. To save herself from this wretched situation, she married when she was twenty; her husband was a good-natured but weak and sickly man. She chose him neither from love nor impulse, and her married life was a failure. She took refuge in ill-health, and became a prey to serious digestive disturbances which no medicine could cure. But when I gave her unfired food treatment a complete metamorphosis took

place. Not only did the digestive troubles disappear, but her mental condition was ameliorated. She regained confidence in herself, and ceased to be a Communist.'

As I have stated, we must never lose sight of the relationships of the human organism with the subconscious environment, for the human organism is intimately bound up with the universe, with the cosmic rhythm and its periodic cycles; the vital processes are connected with the alternation of day and night; for the course of our life has also its day and night. The British investigator, Sir William Roberts, points out that there is an alkaline flow which begins after midnight and an acid flow which lasts from noon till night. It can be demonstrated that there is a natural time for sleep, and this confirms the common theory of the value of sleep before midnight. The adage 'Early to bed and early to rise' conforms with the natural rhythm of our life.

The extent to which dietetic therapy has been practised and followed in recent years is astounding.

One of the most interesting and convincing evidences is provided by Dr. Jackson, the Canadian physician, who gives us a description of his own illness and of his treatment of his patients in his book *How to Be Always Well*.

Ever since his early youth he had suffered from a weak heart, and was constantly under medical treatment. But in spite of all medical prescriptions he became so seriously ill in his fiftieth year that a first-class specialist gave him only four months to live. His heart trouble was aggravated by glaucoma, and he could only walk a few steps on a perfectly level surface, being able no longer to climb stairs.

At this juncture, Dr. Jackson determined to alter his mode of life completely. He adopted a purely vegetarian curative diet with abundance of raw foodstuffs. He started to practise breathing and other physical exercises while lying naked in bed, until he was able to go through all these exercises in the standing position. When he found that his physical exercises were beginning to heal his condition, he added cold baths to the treatment. In his account of his case he emphasises that while taking sunbaths and fresh-air treatment he wore as little clothing as the law allowed. He next began to take walks out of doors, and increased this form of exercise to ten or twenty miles a day. He was, in fact, completely cured.

At the age of sixty-six, Dr. Jackson was able with a professional cyclist to take part in a cycle race of 1,300 miles, lasting nineteen days, in which he showed signs of greater power of endurance

than the sportsman himself. In his eightieth year he was able to walk ten miles or more, give lectures and show every evidence of full health and vigour. Ever since his severe illness in his fiftieth year, he had taken no medicines and had only bathed in cold water. His glaucoma disappeared together with the other symptoms.

This heroic doctor owed his health, which lasted until extreme old age, to his own recognition of the *value of correct feeding* and to his perseverance in his exercises, undaunted by the seriousness of his case. It certainly demands self-discipline as well as knowledge for a man to forsake his accustomed habits of diet and to keep to the same regimen for a long period. There is nothing harder than to break off habits of eating and smoking which have been indulged in for years.

That is why the clinically experienced dietician is sceptical when a theoretical physiologist claims that he can alter the traditional diet of a whole nation, if only for a short time, and even more so when he imagines that he can do so permanently. All plans for balanced national diet depend upon a social reorganisation, necessitating much time and education in order to carry them through. The masses will not consent to an ordered change of food. We doctors know how difficult it is to make the patient keep up an invalid regimen in cases of diabetes and similar metabolic affections. How much resistance and how many objections have to be met and overcome!

We must therefore find another method, which is best enforced by means of periodic days of diet and which can be carried on for years. The necessity and practical success of these dietetic holidays has been shown in greater detail elsewhere.<sup>1</sup> They are easily introduced and should be embodied in every plan of nutrition intended to improve the condition of the nation, and made part of the compulsory school curriculum without delay.

Popular enlightenment on questions of food is essential in order to familiarise the masses with the dangers and harmful effects of wrong feeding. An experienced practitioner accustomed to public speaking or newspaper writing on medical questions knows best how this may successfully be attempted. And he knows, too, that the health of the people cannot be divorced from a correct—that is an organised—method of diet.

<sup>1</sup> *Nutrition and Victory.*

### III. CIVILISATION AND DIET

The Viennese biochemist Otto von Fürth said: 'Just as in the past decade man has been enlightened by the discovery of those vitamins which are essential for mere physical well-being, the coming decade may be employed in the discovery of the vitamins which are necessary to cure people of the diseases of hatred, egoism, envy and insanity, which are the roots of more evil than beri-beri, scurvy, rickets and pellagra taken together.'

If we look back on all the subjects we have passed in review, we shall see that the average daily regimen of civilised peoples is lamentably deficient in essential nutriment, consisting, as it does, chiefly of meat, white bread, pastry, tinned foods and refined sugar, with vegetables and fruit in small amounts only, and these in a denatured state.

We remove the germ and the husk from wheat to make white flour; we demand only polished rice; we give the most valuable elements in sugar to our cattle and eat the impoverished, flavourless residue; we are gluttons for protein, which we consume in enormous quantities in our meat, cheese, eggs and milk; we take vast amounts of fat and indulge immoderately in salt, while our tinned foods are tainted by noxious preservatives. In fact we make every effort to rob our food of all its wholesome properties.

Our diet, therefore, deprived as it is of minerals and vitamins, is unbalanced and lacking in the essential elements of nutrition. Sooner or later the results of this unnatural bill of fare will be visible, in the form of deficiency diseases and a legion of other metabolic disturbances which arise from malnutrition and weaken both resistance and efficiency.

The human body is able to adapt itself, to a large extent, to the conditions of its environment, though this adaptability varies with the individual. Civilised nations have been enabled to condition themselves gradually to their defective diet, and errors in diet can be made with impunity so long as health safeguards our resistance. But when the tolerance of the system is strained its patience becomes exhausted, and a state supervenes which we recognise as illness.

Illness always reveals a state of disorder in the body; the balance of the system is upset and all our processes and functions are thrown into disarray. But this is not all; physical disharmony brings mental disharmony with it. Fear, depression, even epileptic attacks, are due to a disturbed condition of the mind. As I have

mentioned before, it has been proved that men fed exclusively on meat and concentrated proteins betray symptoms of a disturbed mental balance. Protein poisoning produces the conditions mentioned above, together with convulsions and even total unconsciousness. Experiments made on animals have given similar results. We need not therefore be surprised to find that the disorders produced by excessive protein can be cured by salt-free and unfired food.

Everyone has heard of a fatal mental affection which is chiefly found among young people. They seem to have two separate personalities, a Jekyll and a Hyde, and this splitting of the conscious functioning of the brain finally leads to madness. This disease, known as schizophrenia, was formerly incurable, but today it can be cured by influencing the metabolic processes, one of the most important of which is nutrition, thus showing the intimate relation between metabolism and the mind. As mentioned in the section on vitamins, a deficiency in Vitamin B may lead to loss of memory and to confabulation. A commoner example is migraine; we all know how this condition affects the outlook and temper, making a misanthrope of the most light-hearted optimist. This condition, it was found, could be cured by means of a saltless, protein-free diet, and the success of the cure has encouraged a wider application of the saltless regimen. Take again sterility in women, and the strange, tortured characters it produces. But sterility is due to lack of Vitamin E, and therefore, like other cases of vitamin deficiency, is curable.

Schizophrenia and sterility, two serious afflictions which are both curable by diet, show how right or wrong nutrition can alter the whole life of an individual. Realising this, we can look further and see a narrow bridge leading across the gulf that separates us from full comprehension of the mental sterility of mankind.

Years, decades and generations pass by, and no decline is seen; yet slowly, unconsciously, the collapse of health and sanity is being prepared. It may be a chronic disease. It may be physical degeneracy. Chronic diseases strike at the individual and shape his particular destiny, but bodily degeneracy shapes the fate of a nation. 'Man is what he eats.'

Experiments on animals have provided us with evidence of the relation between the invisible decline and the visible disease. Animals fed on a badly organised diet show an interval before the appearance of the full syndromes of deficiency disease. This period McCollum calls 'the twilight zone of nutritional instability'.

But it is not only animals in laboratories which live in this twi-



light zone. We, all of us—all civilised mankind—are to-day living in the twilight, and we can see, if we look, how the whole of our culture is in decline. The diseases of civilisation are only the result of this nutritional instability. The increase of certain morbid symptoms goes hand in hand with the elaboration of civilisation and technical perfection. But these symptoms are seen not only in the physical sphere; at the same time we observe the prevalence of fatigue, lack of resistance, irresoluteness; we awake from sleep, not fresh and fit, but tired. Our power of resistance, not only to infection and the common cold, but even to moral influences, is weakened, and introspection is replaced by extrospection; our mental condition is one of irritability, depression and pessimism; for disharmony in our food means disharmony in our mind, a tired mind goes hand in hand with a tired frame. And mental fatigue leads to 'fatigue of life', one of the most significant and tragic, as it is one of the most dangerous, consequences of the twilight zone in which we live to-day.

Those, however, who have been able to recognise this morbid condition will undergo a revival of circulation when the sick body is given the food it craves, in the form of fruit, green salad and unfired foods; those who have been shown how diet can heal the gravest maladies in man will have seen the great mystery of nutrition. For nutrition is more than metabolism; it is a symbol and exemplification of the great cycle of life. But it is only the physician or the person who has seen all the results of correct nutrition in his own body who can fully realise the dangers of our inadequate diet and its menaces to our society and civilisation. And he will know more than this, for he will look beyond the diseases to the mental symptoms of our epoch. Knowing the relation between food and mood, familiar with the twilight zone, he will see the decay of culture, the lack of enterprise, of moral fibre, of confidence in the future, and know why men are so weary—wearied of resisting the onslaughts of infection, but wearied still with the fatigue of the soul.

It is the fatigue of the soul alone which can explain those historical events whose dreadful consequences we are witnessing to-day. The doctor versed in the mysteries of biology can clearly see the cause of breakdown in our bodies. But our country is as much a living organism as our physical frame; it has a heart, a breath, a pulse. Indolence of soul in its inhabitants indicates an indolent national soul, a nation in decline, a defeated nation. And for the sake of all mankind, now and in the ages yet to come, that we must never be.

Correct food enables us to restore the defective circulation in every blood-vessel in the system, to reinforce our defences against infection, to revitalise the organs exhausted by fatigue. We must increase our powers, stimulate them to maximum capacity, setting vigour against indolence, energy against exhaustion, purposefulness against indecision.

We must come out of the twilight zone—out into new light, with all our powers of mind and body enhanced, first eating correctly, then thinking and acting correctly; to rescue civilisation by building up a culture, a culture founded on and glorifying liberty, belief, justice, humanity, the only true values, the sole eternal values, the values the preservation of which is bound up with our victory in the titanic struggle that is being waged to-day, thus fortifying ourselves for the task that lies before us.

#### IV. CONSEQUENCES OF MALNUTRITION (POST-WAR PLANNING)

Both malnutrition and under-nutrition lead to various metabolic disturbances, as well as to the many kinds of deficiency diseases.

During the last twenty years the science of nutrition has developed apace. The results have profoundly influenced the scientific aspects of medicine.

It is quite impossible to discuss post-war planning unless one realises the paramount importance of nutrition. A full knowledge about the whole inter-relationship between the hormonal system, nervous system, and the various deficiency diseases due to malnutrition is indispensable. It is quite obvious that the various fully developed symptom complexes will present no difficulties of recognition and classification, and, let us hope, they will be treated accordingly. But our special concern is the recognition of the disguised forms of dysvitaminosis with their chameleon-like blurred symptom complexes.

Our medical outlook has been fundamentally changed since we have learned to realise how extensive is the symptomatology of the various deficiency diseases. It is certainly not only the fully characterised vitamin deficiency diseases, the so-called classical types of avitaminosis, such as scurvy, beri-beri and pellagra, which endanger health and which, of course, are not difficult to diagnose. But our attention must be directed to those disguised forms which are of such paramount importance since we know that lack of vitamins is responsible for a variety of symptoms still

unrecognised and misinterpreted. Neuralgia, neuritis, cardiovascular symptoms, gastro-intestinal troubles—all these can be and are usually caused by lack of the specifically required vitamins. In recent years medicine has improved by leaps and bounds, and this improvement must now be made the basis of all our attempts at post-war planning. To-day we know that all types of dysvitaminosis are associated with hormonal disturbances. We know that the hormones and vitamins are closely interrelated. Every hormonal disorder leads to a vitamin disturbance and vice versa.

Even to-day it is astonishing how many disguised forms of pellagra or scurvy are noted, which if treated in the proper way can be cured with dramatic effect.

We must not forget that the inhabitants of the occupied countries will show more especially an impairment of the hormonal system. Let me draw attention in this connection to hyperthyroidism—the many forms of thyrotoxicosis resulting from mental strain and mental exhaustion due to psychic shocks, bombing, etc. We have to emphasise that hyperthyroidism is practically always associated with impaired liver functioning. It leads also to an impoverishment of Vitamins A and B, whereby the defence against infectious diseases is diminished and consequently the contraction of infection is facilitated.

On the one hand, exhaustion, infectious diseases and mental strains will exacerbate the pituitary deficiency; on the other hand, the utilisation of the whole Vitamin B complex is regulated by and dependent upon the anterior pituitary lobe.

It is clear that we cannot here enter into further detail on this point, but we must certainly reckon with a preponderance of metabolic disturbances as the result of dysvitaminosis and dysmineralisation. One point, however, must be emphatically stressed from a clinical aspect.

The symptoms with which we are confronted are not caused by the metabolic disorders, but result from the impaired functioning of the effector organs due to the various metabolic disorders. The metabolic disorders are caused by all kinds of exhaustive conditions, as well as by the various types of dysvitaminosis. By administering hormones and vitamins we treat the metabolic disorders and not the symptoms. Our outlook as regards the symptomatology must be altered to conform with our advanced knowledge.

The main effector organs are the liver, the muscular system and the nervous system. The symptoms can be either predominantly

mental or physical. Any kind of exhaustion from whatever cause is interlinked with disturbed glycogen metabolism, because the glycogen storage within the liver, the muscles and the nerves is responsible for the endurance of the organism. If the glycogen metabolism is disturbed this will lead to impaired functioning of the liver, muscle and nervous systems. But the glycogen metabolism is closely connected with the whole vitaminisation and with the mineralisation. The mineral balance is indispensable for a proper utilisation of the vitamins, but this mineral balance is dependent upon a normal functioning of the adrenal cortex hormone. Therefore we must have an adequate supply of all those preparations which will be necessary in order to influence the whole process of mineralisation and of vitaminisation. This question leads to another problem which unfortunately is much neglected, despite the fact that this very problem is of the greatest importance for the clinician. I refer to the utilisation of vitamins.

#### V. THE UTILISATION OF VITAMINS

I must draw particular attention to this question which has to be regarded as a major problem. For it is just the question of utilisation that will assume paramount importance in our attempt to deal with the population of the occupied countries.

In all discussions regarding the supply of vitamins the problem of utilisation is either entirely ignored or not sufficiently stressed.

We must realise that the result which we wish to obtain by the supply and administration of vitamins never depends exclusively upon the appropriate vitamins, but also upon whether the organism will or will not be able to assimilate and thereby use these vitamins in the desired form. The utilisation will depend upon many factors. First and foremost, a normal mineral and hormonal balance will be needed. If these two factors are impaired the vitamins will be less effective or even completely ineffective. But another factor must be taken into account, namely, that if vitamins are supplied without a proper amount of carbohydrates, proteins and fats, these vitamins will be useless from a nutritional point of view. The vitamins can certainly prevent or influence one or the other symptom as a result of dysvitaminosis. But this has nothing to do with the feeding problem.

There is a fundamental difference between whether vitamins are supplied as an additional food, in order to cope with symptoms or diseases arising from vitamin deficiency under normal conditions, or whether they are supplied for the purpose of dealing

with starvation and all its consequences. We must bear in mind that normal environmental conditions, or, let me say, normal physiological conditions, will call for quite different methods of treatment than would conditions which should be considered as pathologic environmental conditions such as will obtain in occupied countries. The subjects are not only exhausted in mind, body and soul, but also half starved, and it is certain that our task will be quite different when considered under this aspect.

Another factor which is responsible for the proper utilisation of the supply of vitamins is the liver functioning. But we shall have to reckon with hepatic disorders due to starvation, and therefore the normal supply of vitamins will also be insufficient. I cannot, in this connection, deal with the whole pathogenesis of hepatic disorders or of hypoglycemic conditions, and will merely draw attention to the fact that the occurrence of hypoglycemia will be due to liver damage as well as to hormonal disorder, a condition which will therefore predominate in the liberated countries. If the liver and the hormones are defective the vitamins cannot be utilised.

In order to make this quite clear I will give an illustration. We are often surprised at the different way in which cases of scurvy or rickets respond to a proper supply of the required vitamins. Some cases will show a dramatic effect, whilst others will show no change whatever. The effect depends entirely upon the mineralisation. If, for instance, there is increased sodium, in association with acidosis, Vitamin C, even if given in large supplies, will remain inoperative. The vitamins are most effective in an alkali *milieu* and if the tissues are rich in potassium, phosphorus and calcium. Moreover, there is evidence enough to show that Vitamin B will only be utilised if there is a proper amount of carbohydrates, particularly of sugar, because the utilisation of Vitamin B<sub>1</sub> depends to the same degree on the intake of carbohydrates, as the proper utilisation of carbohydrates does upon the proper amount of Vitamin B<sub>1</sub>.

In accordance with my previous remarks, we shall not be surprised to find many people suffering from thyrotoxic conditions. Thyrotoxicosis will be caused in part by the mental strains afflicting all the people of the occupied countries, in part by starvation and other factors leading to hepatic disorder.

If this assumption is correct we know that under such pathological hormonal conditions there will be a much greater need of Vitamin A and B<sub>1</sub> than under normal physiological conditions, as, on the other hand, we know that in a hypothyroid condition neither

Vitamin A nor B<sub>1</sub> will ever be utilised. Furthermore, we must take into account that the effect of Vitamin B<sub>1</sub> is dependent upon the caloric supply. Recent knowledge has contributed to a much better understanding of the interconnection between calcium, iron and vitaminisation. In this connection I wish merely to stress one more point regarding the supply of Vitamin B<sub>1</sub>. If there exists starvation in carbohydrates the administration of Vitamin B<sub>1</sub> will accentuate hypoglycemic conditions and will therefore not produce the desired effect.

We must always bear in mind that mineral deficiency hampers the whole process of normal vitaminisation.

It should also be mentioned in this connection that the vitamins also exert a stimulating effect on anti-body production.

This short survey is only intended to draw attention to the importance of all those complex problems which everyone must know if he wishes to deal with the feeding problem, as viewed primarily from a clinical aspect. The question of utilisation must be made familiar to the physician, who will be the first to deal with the various diseases with which he will be confronted. Without such a sound knowledge and a profound understanding the doctors will not be able to handle correctly all the various tasks connected with post-war relief.

Summarising, I wish to emphasise the importance of proper feeding in the treatment of all the various infectious diseases. We can neither treat an infectious disease, nor impede the spread of epidemics, nor yet prevent the appearance of post-infectious symptoms, without being fully aware that these conditions are all dependent upon a proper diet in which the vitamins and minerals play such a preponderant rôle.

## XVI

### THE PROBLEMS OF FEEDING EUROPE

**F**ORESEEING the difficulties with which we should be confronted after the liberation of the occupied countries, and concerned as we all are about the vital importance of securing a proper food supply, I suggested to my partner, Dr. P. Lansel, that a special meeting be called. This meeting, to discuss the problem of feeding Europe, took place on February 18th, 1943. I give below the Proceedings of this meeting.

Report of Meeting held at Unilever House,  
Thursday, 18th February, 1943

Chairman: *Sir Ernest Graham Little*, F.R.C.P., M.P.

Among those present were:

Dr. Lansel,  
Dr. Pulay,  
Dr. Keller (Prague, now New York),  
Prof. Bigwood (University of Brussels),  
Dr. Skladal,  
Prof. H. J. de Boer (Netherlands),  
Dr. J. van Ormondt (Netherlands),  
Dr. J. A. F. van den Belt (Netherlands),  
Dr. C. C. L. Eygenraam (Netherlands),  
Dr. Babecki (Poland),  
Dr. Dmoukowski (Poland),  
Dr. Goodman (United Kingdom),  
Dr. H. A. Smith (United Kingdom),  
Dr. Branscombe (United Kingdom),  
Colonel Stock (Union of South Africa),  
Lt.-Col. Myres (New Zealand),  
Dr. Benau (Yugoslavia),  
Dr. Kojen,  
Dr. Cawadias,  
Dr. Gautier (Geneva),  
Mr. P. Rykens (Lever Brothers and Unilever Ltd.),  
Mr. H. Ballantyne.

*Sir Ernest Graham Little* opened the meeting.

The object of the meeting was to consider the problem of feeding Europe, and more especially the occupied countries, upon the termination of hostilities, and to consider the means of avoiding the danger of malnutrition which past experience has proved to be the mother of epidemics.

The Chairman, as member of Parliament for London University and physician-in-charge of St. Mary's Hospital, was able to tell the assembly that the British Parliament had taken a long and persistent interest in this question and was already sending plentiful supplies to Greece. The number of medical men in Parliament was small, but as the Medical Profession would have to deal with epidemics and the prevention of diseases resulting from the

war, this meeting had been called in order to obtain the opinion of the doctors.

*Dr. Bigwood*, nutrition expert to the Belgian Government, proposed that, in considering this problem, the long-term and short-term views should be taken.

1. Would food supplies for the occupied countries be provided on the basis of pre-war consumption, or would the requirements of each country have to be assessed according to an optimum standard of the average diet and the varying degree of malnutrition prevailing there?
2. To meet the demands for certain foodstuffs, milk, wheat, etc., the large producing countries of the world would need a long-term policy in agriculture to satisfy the requirements of a short-term policy of relief.
3. It must be realised that, at the end of the war, disorganised services which could not yet be fully anticipated, would hamper distribution.

*Dr. Erwin Pulay* offered the following

#### SUGGESTIONS FOR THE FEEDING OF EUROPE AFTER THE WAR

The problem of feeding Europe, more particularly as it concerns the occupied countries, will be one of the main tasks to confront us in view of the frightful conditions now prevailing on the Continent.

*Dr. Pulay* said:

'Dr. Lancel and I have called this meeting in order to submit to you some suggestions of constructive value, but before entering upon our special aspect of the subject I should like to be permitted to make a few general remarks.

'Speaking in my capacity as a doctor, I wish to stress the point that it is the physician's task to deal with all problems connected with nutrition, for these are not primarily the concern of physiologists. We nutritionists should and must have a decisive voice in these matters, because after all it is we who are confronted with the manifold diseases caused by malnutrition and under-nutrition.

'We must endeavour with all the means in our power to overcome all these difficulties, in order to prevent the occurrence of all the diseases which are caused by malnutrition and starvation. To this end we must be guided by the experiences we obtained after the last war; for it must be understood that the outbreak of epidemics must be regarded mainly as the consequence of malnutrition, and in particular as a result of vitamin deficiency.



'As a result of our experiences after the last war we now know that infections are conditioned, not only by the respective germs, but by lowered power of defence within the organism, a defence which is diminished if the organism is mentally depressed or physically exhausted. Mental depression, fatigue and exhaustion can be strikingly influenced by a proper supply of vitamins, for it is well known to how great an extent not only infections, but even the mental state can be successfully treated by the proper supply of appropriate vitamins.

'All these problems have been thoroughly discussed in my books *Nutrition and Victory* and *The Pathology and Therapy of Fatigue and Exhaustion*, written in collaboration with Dr. P. Lansel (London), Professor L. Ascher (Berne) and Rudolf Keller (London-Prague).

'In order that an adequate supply of food may be provided for all the people of Europe from the first moment of Allied occupation, it is imperative that we discover a practical method of supplying the population with the necessary vitamins and minerals, fats, sugar and proteins.

'The basic elements of daily nutrition are proteins. The supplying of proteins, however, will not only constitute the main problem, but unfortunately is one which can only be solved in an unsatisfactory manner. We must face the fact that the people of Europe are more or less starved in proteins, fats and vitamins, and the quantity estimated per head cannot therefore be determined according to any standard prevailing under normal peace conditions.

'We can assume that, at the very outset, in spite of all the abnormal conditions now prevailing, approximately 20 gm. of protein per head per day will be obtainable within the occupied countries. Therefore we must discover means of supplying the further 50 gm. which will be needed, and we must ensure that these proteins be brought over by the troops of invasion. There are several methods whereby the proper amount of proteins can be supplied: (a) in the form of soya, which represents the main source of protein supply in China; (b) in peanuts, viz. the chief source for America; or (c) in the form of cereals. We must bear in mind that while soya contains 40 per cent. of protein, it is also very rich in potassium and in all the vitamins. 25 gm. of soya per day per head will be needed, 35 gm. of peanut, a supply of 80 gm. of cereal.

'One of the cheapest methods of supplying the 20 per cent. of our protein needs is in the form of urea, which furnishes a daily

amount of 14 gm. per head.<sup>1</sup> Therefore it can be seen that we could utilise this very cheap product, urea, by introducing it, for instance, into coffee. Coffee, like cocoa, is one of the favourite continental beverages, and at the same time it supplies the organism with potassium, which may perhaps be responsible for its stimulative effects.

Thus, through peanuts and urea we could supply 49 gm. of protein, which in addition to the 20 gm. which we can assume is furnished in the form of bread, potatoes, etc., will supply all the necessary protein values. The remaining proteins can always be added by glycine, dried milk or dried egg.

Another important essential will be the supply of fat and vitamins, for we know to-day that it is the vitamins which are responsible for an organism's susceptibility or non-susceptibility to infection. Furthermore, we know that a lack of protein can be compensated by fats and carbohydrates.

In order to be able to safeguard the organism by means of the minerals and vitamins which are indispensable for health, we suggest the preparation of so-called "food reinforcers".

(1) *A reinforcer for sugar.* Sugar must be fortified because glucose sugar is the main nutrient which safeguards against exhaustion and infection and is the chief promoter of energy. This reinforced sugar should contain all the necessary minerals which are to-day regarded as inorganic vitamins, as well as Vitamin C. Five-eighths of an ounce of a mineral salt, such as Equilibrin, to one pound of sugar would be the daily supply for all the minerals needed by the organism. In this connection we must draw particular attention to the fact that all the vitamins, as well as the sugar within our organism, are more effectively and usefully utilised if the organism is rich in all those minerals, particularly in potassium and phosphorus. But at the same time fewer proteins are necessary, because even the amino-acids which are decomposed by the proteins obtain increased value if the organism is enriched by all these minerals, sugar and vitamins.

Instead of sugar and this mineral salt we can use cane molasses, one quarter of a pound of which will give the organism the daily supply needed of sugar and potassium. Canada, the United States, India and Australia are very rich in this cane molasses.

(2) *Fat* must be regarded as a food reinforcer, if supplied in the

<sup>1</sup> More than 150 articles have been published on the Continent to demonstrate that urea can be regarded as supplying 20 per cent. of our protein needs, whilst Great Britain has contributed only one paper which has dealt with and confirmed this statement.

form of margarine. Margarine is not only important for its content of about 88 per cent. of fat and double amount of carbohydrate calories, but also in that it contains nine times the nutritive content of potatoes. Fat, however, fulfils another rôle. The assimilation of Vitamin A, D and K is dependent upon fat, because without fat these vitamins, which are so important, remain entirely unutilised. Margarine is fortified by Vitamins A and D, both of which are needed for a proper mineralisation balance, as well as for defence against infections (calcium, phosphorus).

'(3) As a third reinforcer we suggest *brewer's yeast*, which will contribute all the Vitamin B and at the same time must be regarded as a protein supplier. Approximately 7 gm. of brewer's yeast daily will give all the Vitamin B needed. In this connection the importance of brewer's yeast should be stressed, for the reason that it contains 140 gamma per gram Vitamin B, as compared with the 80 gamma per gram of baker's yeast.

'By means of hydrolisation or enzymatisation, brewer's yeast can be made to produce all those various amino-acids which are after all responsible for the nutrition value of proteins. Therefore by using brewer's yeast the organism is supplied not only with a large amount of vitamins, but at the same time with very rich supplies of proteins. We must not forget that it is not always the caloric effect or the actual quantity of proteins which counts, but that through the intake of yeast all the oxidation processes within the organism are stimulated, with the result that even the poorer protein nutrition obtains greater effect. Brewer's yeast must therefore be regarded as one of the important catalysers, whereby all the nutritive elements are much more effectively utilised.

'Summarising, we see that we must prepare three types of so-called food reinforcers, which should be added to the daily food obtainable within the occupied countries. (a) Reinforced sugar, to supply the organism with all the minerals<sup>1</sup> and the necessary amount of Vitamin C; (b) Margarine, containing fat, calories, as well as Vitamins A and B; (c) Brewer's yeast, containing all the Vitamin B needed.

'In this way the whole population of Europe will be properly fed during several months, until normal food conditions can be re-established through the procurance of greater shipping facilities. We must not forget that during the first months of Allied invasion we shall be able to utilise all the factories available on

<sup>1</sup> Potassium, phosphorus, iron, copper and Calcium (particularly important for children.)

the Continent, as well as the whole sugar industry which can be adapted to our scheme.

'It is obvious that in countries in which milk, cheese, potatoes and other basic nutrients are obtainable, the authorities dealing with the food problems will ensure that these reinforcers are available for their use. But it is of the highest importance that all these reinforcers be prepared on such a scale that after the invasion of the Continent they can be supplied by bombers, so that the population may be properly fed at the earliest possible moment. I do not think that it is necessary to enter into fuller details at this time, but what I wish to emphasise in this connection is the fact that we are to-day able to deal with all these problems in an effective, practical and constructive way, and this we must do.

'For this purpose I have thought that the Unilever Company might establish contact with the new methods of Professor Weitzmann, who has already used brewer's yeast, as well as with all the brewers of this country and of the United States, and later of the Continent and, last but not least, with all the sugar industries.

'These reinforcers are easy to prepare, and the principle upon which they are based depends upon the increase of the cell electro-potentials within the organism. The increased electro-potentials are not only responsible for whether the vitamins are or are not utilised, but they are responsible also for the operation of the defence mechanism of our organism against infection.'

The ensuing discussion was based upon the following recommendations.

### *Phases of Relief.*

As the war would not end suddenly but would merge into peace, there could be no distinction between pre-war and post-war relief. The phases of relief, *Dr. Cawadias* suggested, might be classified as follows:

1. Immediate relief through the International Red Cross, such as is being sent to Greece.
2. Relief upon the immediate liberation of the various countries, brought by the Red Cross and the military authorities.
3. Relief through the liberating armies on complete liberation of the occupied territories, representing, in fact, post-war relief.

### *Natural Foods.*

*Dr. Cawadias* asked that the type of food supplied should be based on the natural foods peculiar to the populations concerned. Although Greek wounded in Athens hospitals were receiving

parcels through the Red Cross such as were being sent to British prisoners of war, they were asking for their natural foods of black bread, goats' cheese, etc., and regarded the contents of the present parcels as luxuries.

The science of nutrition, in which such progress has been made, has shown that reinforcement with vitamins and minerals is complementary to the natural foods.

### *Proteins.*

Protein-containing foods, such as milk, meats, fish, etc., were considered, and the question of conserving shipping space by supplying foods in dehydrated form was discussed. Soya, peanut and cereal were felt to be the best protein-containers, and *Dr. Branscombe* pointed out that peanut, after extraction of the oil, contained 50 per cent. protein and had only a small fibre content. The oil could be used as a reinforcement for other foods.

### *Urea.*

*Professor Bigwood* considered urea to be wasteful, in view of the shipping space required to carry the necessary quantities, on account of the rapidity of its elimination from the system. Over a long period of repeated doses a small quantity of urea may remain, but it would hardly be enough to justify mass exportation.

There are no urea plants either in this country or in the United States, and with every factory concentrated on war industry it would be extremely difficult to begin urea production.

*Dr. Branscombe* suggested that nitrogen, which after the war would no longer be required for the manufacture of explosives, should be available for agricultural purposes, and that the protein replacement for the European population should be supplied on an agricultural basis.

It was also mentioned that urea was believed to be the cause of some diseases.

*Dr. Pulay* replied that neither normal food nor normal shipping space could be provided immediately after the war, and for this reason substitutes must be considered as an emergency to cover the first four or five months, after which a return could be made to normal food. The main point was to provide nourishment for the whole population of occupied Europe as soon as possible.

*Sir Ernest Graham Little*, the Chairman, thanked *Dr. Pulay* and the other members of the meeting for their constructive suggestions. He considered that, in an emergency such as this, use should be made of practical experience.

## XVII

1933

**I**N the preceding chapters I have attempted to show the task of the physician and have accordingly dealt with Medicine from a broader angle. I have called attention to the development in Medicine and Psychology and have emphasised the great contributions made by the continental, in particular by the Viennese Medical School, to recent advances in Medicine. I tried to explain that our psychological understanding has changed fundamentally, and that we have to make practical use of all our knowledge if we wish to deal with human events.

I made clear that physicians of great reputation have to be regarded as international. The activities resulting from their contributions to mankind can never be confined to geographical boundaries.

It is essential to bear in mind this point of view if we wish to deal with the events following upon Hitler's accession to power.

Since Hitler became all-powerful Germany has undergone an entire change. The racial theory has become the dominating idea of the nationalistic concept, and has received the support of most of the representatives of Germany's intellectual life, including both the medical men and the biologists. This fact must be emphasised! Without their assistance the various crimes and barbarities could never have been perpetrated. If Hitler had been boldly confronted by the united opposition of all the intellectuals of Germany and in particular of Germany's medical profession, the Nazi system would have been dealt a deadly blow at its very beginning and all the subsequent evils would have had no chance of developing.

It has been forgotten that the foundation of a new epoch in Natural Science, in Psychology and in Economics was laid by Jews (Paul Ehrlich, Albert Einstein, Freud and Marx). All the works of these men were publicly burnt in Germany. It was forgotten that no less than 13 winners of the Nobel Prize for Natural Science were Jews. Among them figured personages such as Paul Ehrlich, the discoverer of Salvarsan, the founder of experimental therapy and the great fighter against syphilis; and James Frank and Niels Boer, the founders of the modern atomic theory. Moreover, there were others of no less importance whose contribution

represented landmarks in Medicine: Neisser, the discoverer of the bacillus of gonorrhea, Wassermann, the man who made possible the diagnosis of syphilis through blood reaction; Goldberger, who demonstrated the cause of pellagra; Minkowsky, one of the greatest metabolic specialists, who proved that diabetes is caused by a disturbance within the pancreatic system; Ferdinand Cohn, who established the plant nature of bacteria; Jacques Loeb, who created a sensation by his successful experiments with the artificial incubation of non-fertilised eggs and whose work on the antagonistic behaviour of electrolytes is classic; Eugen Steinach, who established bisexuality in human beings and whose research work demonstrated that sex is interchangeable,—a discovery which laid the foundation for the modern treatment of rejuvenation. It is unnecessary to mention in detail all the many other prominent Jews, such as Ludwig Straube, Stilling, Romberg, Unna, Jaddassohn, Zuckerkandl, and Landsteiner, who by their work have erected milestones in the history of Medicine.

Despite all these glorious records the German clinicians suddenly changed their attitude over night and abandoned all their former collaborators, all their faithful colleagues. They erased from the honour roll all these great names, merely in order to become supporters and tools of Hitler.

Before I proceed with this subject, may I be permitted to say a word on the subject of the racial theory? In the first place, this racial theory was not of Hitler's invention, for it can be traced back to Heinrich von Treitschke, a prominent German professor who was idolised in his day. His philosophy started with the declaration that it is the task of the Germanic race to enslave the rest of mankind. Treitschke interpreted Germanism as being opposed to Christianity, and he taught the doctrine that 'might is to be identified with right'. Next, the supremacy of the Aryans, the inequality of human races with their moral and individual diversity, was pointed out by Count Arthur de Gobineau, who can be called the originator of the theory of the master race. Houston Steward Chamberlain, in his book *Foundation of the XIXth Century*, distinguished only two races, the Teutonic and the Anti-Teutonic peoples. He emphasised, or rather, let me say, he proved 'that the Germans as Teutons must be regarded as the dominant factor in the evolution of civilisation'. Alfred Rosenberg, Hitler's race expert and the philosopher of the Third Reich, only started where his predecessors left off, and the racial theories in Hitler's *Mein Kampf* are merely reflections or variations of the Gobineau and Chamberlain. But it is certainly not my object to

deal with this problem in detail and to show that such a racial theory is totally devoid of any biologic foundation. So I will content myself with quoting the opinion of one of the greatest living biologists, Professor Julian Huxley, and with drawing attention to the statement made as far back as 1936 by the Bishop of Durham, Herbert Henson. These two authorities suffice for the settlement of this question.

*The Nazi Racial Theory by Julian Huxley.*<sup>1</sup>

Every time you use the word 'race' you are playing into Hitler's hands. This may sound rather a sweeping statement, but it is true. The Nazis have taken over from biology the vague idea of race, have applied it in an unscientific way to human beings, and have proceeded to use it to justify their ambitions for world domination by asserting that they themselves are the master race, the *Herrenvolk*, which is so superior to all other races that it is justified in treating them as inferiors.

The term 'race' as used in zoology means a group of animals possessing fairly well-defined characteristics which set it apart from other similar groups, and with a single common ancestry for all members of the group. Thus, the blue tits of Great Britain differ from their relatives on the Continent in various smallish but quite definite ways. We call one the British race and the other the Continental race, and give them Latin names to distinguish them. The reason for the differences of the British race is presumably that the birds of this species of our island have been isolated from those on the Continent for a sufficient length of time for natural selection and internal variation to bring about differences in their hereditary constitution.

The same sort of things, we must assume, began to take place among human groups in the early days of our own species, hundreds of thousands of years ago, and three or four main races—the white, the black, the yellow and perhaps the brown—have differentiated. Later on, out of each of these main races, minor types or incipient sub-races must have differentiated. For instance in the population of Europe we can distinguish three main types (excluding Jews): the Nordic—tall, slim, long-headed and fair, the Alpine—very broad-headed, rather dark and thick-set, and the Mediterranean—smallish, slender, long-headed and dark. This last type also occurs in many regions outside the confines of Europe, and may be light or dark brown in skin and colour.

However, man differs from all other animals in various ways, one of the most important being his mobility and restless urge to migrate, another his readiness to mate with individuals of groups of quite different appearance. As a result of these two facts, the incipient process of race formation in man was first blurred and finally reversed, until to-day every human group (with the possible exception of a few small

<sup>1</sup> *John O' London's Weekly*, Jan. 16, 1942.



communities of primitive peoples living in very out-of-the-way parts of the world) is thoroughly mongrelised. This applies just as much to Africa or to Asia as it does to Europe. We are apt, for instance, to think of the inhabitants of Africa as all being negroes. Actually the true negro stock, even in a moderately pure state, is only found in the area extending from the Sudan to French West Africa. Everywhere else there has been a mixture, sometimes very large, from quite different stocks, such as the Hamites (akin to the Berbers of to-day and the Moors of Shakespeare's time) and various Semitic peoples.

Even in Europe there is a considerable admixture of negro and other African stock in Portugal, Southern Italy, etc., and of Mongolian stock, e.g. in Eastern Europe. In North Africa, of course, the process has gone even further. We have what is rightly called a melting-pot—a melting-pot of races as well as of cultures and nationalities.

This process of mixture has been going on since long before the dawn of history, and, during the historical period, has been increasing in rate.

What, then, are so-called racial stocks? Some of the differences between them are, of course, due to heredity, like the differences between the black man and the white. On the other hand, even here you do not get the state of affairs found in animals, where one race is sharply marked off from others. In man, in every case, there is found a complete gradation from the type characteristic of one presumably original race to that characteristic of another, through every shade and degree of mixture, and even in the regions where the greatest concentration of good racial types is to be found, there is always some degree of mixture with other types. When we get down to smaller groups, however, like the so-called German or British 'races', the differences due to heredity are much smaller and the degree of mixture much greater.

Most of the differences between Germans and Englishmen are not due to heredity at all but to tradition, in the broad sense of the word. By tradition I mean language, social structure, tricks of mannerism and dress, and all the background of ideas and social environment which mould the individual human being.

Some time ago the *Listener*, in illustrating an article on 'Race', published pictures of men from various countries of Europe, without captions, and invited their readers to guess to what 'race' they belonged. In most cases the guesses were entirely wide of the mark, though the pictures had not been selected as exceptional; indeed, some of them were taken from advertisements published in the various countries.

In point of fact, all the dominant nations of to-day, such as the British, Russian, German, and, of course, American, are extremely mixed. What is more, this process of mixing has contributed to their greatness. It has long been familiar to historians and archaeologists that the great outbursts of new progress in human affairs have almost always resulted from what they call 'culture contacts', when two different cultures or civilisations mix and mutually fertilise each other. In most cases these culture contacts have invariably been accompanied

by a considerable amount of mixture of different human types, and this, too, has contributed to progress by proving a greater variety of human stocks within the nation.

Whenever attempts have been made to 'purge' a nation of so-called 'alien stocks', the result has been unfortunate. The most striking historical example was the attempt made by Spain to rid itself of the Moors and the Jews—a step which immediately preceded the decadence of that once great nation. In our own times we are witnessing a similar process in Nazi Germany, where the expulsion of 'non-Aryans' has resulted in the loss to the country of some of its finest brains.

This brings me to the specific policies underlying the Nazi racial doctrine. In the first place there is no such thing as an 'Aryan' race. The word 'Aryan' means nothing more or less than people who happen to speak one of a family of so-called Aryan languages; and as everybody who has studied the subject knows, language is no clue whatever to racial affinity. Conquering groups may impose their language on the conquered, or vice versa, may lose their language, or most of it, in favour of that of the conquered.

But the main thesis of the Nazis is not merely that the Germans are a definite race, usually styled the Nordic race, but that this is inherently superior to all other human groups. This carries with it the corollary not merely that all other groups are to some degree inferior, but that some of them are so grossly inferior as to merit the term 'sub-human'. This idea of racial inferiority was, of course, first applied to the Jews, but has since 1939 been applied to the Poles also. These ideas are a denial of the basic conception underlying our Western civilisation, namely the overriding value of the human individual and the essential equality (not in the sense of equality of endowment or identity of appearance but of what Christian theology would call 'equality before God') of all types of human beings. They are also scientifically untrue.

In the first place the Germans are a thoroughly mixed group of human beings. In the second place at least half of them approximate more to the so-called 'Alpine' racial type, with broad, bullet head and rather stocky build, than to the tall, long-headed, fair Nordic type. Some time ago, before the blood-bath of 1934, Goebbels said that the ideal German was 'tall, slim, blond and manly'. A British newspaper quoted these words without other comment than that of placing them beneath pictures of various Nazi leaders. 'Tall'—like Goebbels, who is almost a dwarf; 'blond'—like Hitler, who is very dark; 'slim'—like Goering, who is no light-weight; and 'manly'—like Roehm, whose private life was known to be very peculiar.

Nor is there the least truth in their thesis that Germans, or, as they often extend the doctrine, people of Nordic type, have been the only real contributors to the progress of civilisation. Some of their own greatest men, like Beethoven and Goethe, have been very far from the Nordic type. In any case, the great inventions which were the start of

all civilisation—the invention of agriculture, of wheeled vehicles, of building in stone, and of the alphabet and of writing—were all due to the dark peoples of the Near East. In later times, Arabic numerals, one of the greatest contributions to efficiency, were, as their name implies, perfected by people of Semitic and Hamitic type. One could multiply examples, but it is unnecessary. The Nazi doctrine is a mere product of pseudo-science, devised as a rationalisation first of their mania to dominate the world, and secondly of their need to find a scapegoat such as the Jews, on whom they can throw the blame when things go wrong and whom they can persecute to provide an emotional outlet for their followers.

As a result of the Nazi doctrine, all anthropological science and history is falsified in Nazi Germany, and all kinds of fantastic myths, which would be laughable if they were not so serious, arise. For instance, we now find Nazi professors and educationists speaking of such absurdities as 'German mathematics' or 'Nordic physics'. It might be thought that Jews of acknowledged world fame would be stumbling blocks to the belief in Nordic superiority. But Nazi theory is ready for anything. Einstein, for instance, is disposed of, in a book which has had a wide circulation in Germany, in the following terms: 'The Germanic scientific world-picture, which Goethe and Humboldt first consciously envisaged and drew for the benefit of us moderns, is now threatened by a new attack from the Middle-Eastern race.' In this, Einstein 'has attempted by means of mathematical formulæ to destroy the simple factual data and the grand Aryan world-picture. However, this attempt, we can already assert, has failed completely.'

The same author elsewhere writes: 'We Germans can claim that wherever Nordic blood dominates, crime is rare. The purer the German tribe the rarer the criminal. In Europe one has almost the impression that criminals belong to another race.'

We may laugh at such absurdities, but they are serious, for they are symptoms of German arrogance and German frightfulness. The Nazi theory of race is a dogma which acts as an intellectual scaffolding for the Nazi pseudo-religion of State supremacy and German world domination. Just as Christian dogma was used in the Middle Ages to justify the most horrible tortures of heretics and mass brutality towards and mass exploitation of conquered pagan peoples, so, too, on an even larger scale, the Nazi theory of German racial superiority is being used to-day to justify aggression and exploitation of the most ruthless and brutal kind.

It is, as I said at the beginning, our duty not to encourage such an attitude in any way. Do not let us forget that in this country there was not so long ago a half-hearted attempt to make out that the British, a people more thoroughly mongrelized even than the Germans, were a 'superior race'. Did not Kipling write of 'lesser breeds without the law'? Everywhere that Fascism or pseudo-Fascism raises its head we see the beginnings of this unscientific but dangerous doctrine of racialism.

As I have already said, every time we use the word 'race' we are, be it in a minor way, hindering our own cause and helping that of Hitler. It is perfectly possible to substitute other terms which are both scientifically more correct and also less charged with political and social dynamite. In most cases one can simply use the word 'people'. Sometimes it is better to say 'nation' or 'culture' or simply 'group'. In other cases, as with the French Canadians or the Jews, one can use terms like 'stock', 'extraction', or 'community'. But whatever terms we use, to think along 'racial' lines is scientifically false, and like most false thinking, practically dangerous and full of possibilities of evil.

*Introduction by The Bishop of Durham.*<sup>1</sup>

When I was requested to write a short introduction to this volume, I felt some hesitation. I reflected that I could not personally vouch for the truth of the statements, or for the accuracy of the translation. But after reading it carefully, I could have no doubt as to the substantial trustworthiness of its account of the situation in Germany. It is entirely accordant with what we already know on evidence which cannot be shaken, and which accumulates daily. No one who has any acquaintance with the revelations which have during the last three years poured from the Press, or has been at the pains of reading Herr Hitler's volume *My Struggle* (which has become almost the Bible of National Socialism), or who has followed the accounts of German affairs which have appeared in *The Times*, or who has studied the remarkable Letter of Resignation which Mr. James G. McDonald has recently addressed to the Secretary-General of the League of Nations, or who has any personal knowledge of Jewish and other 'non-Aryan' refugees from Germany, can have the smallest doubt that in this volume we have a picture of the situation in Germany which is substantially true. Such private information as I have myself received accords with this conclusion. Therefore, I have no hesitation in commending it to the acceptance of the public, and urging them to read and reflect upon its testimony.

This book makes painful reading, but, none the less, it ought to be read by everybody who desires to know the truth. It forms an indispensable supplement to Mr. James G. McDonald's indictment. In an annex to his Letter of Resignation he gave 'an analysis of the measures in Germany against "non-Aryans", and of their effects in creating refugees'. Here we can see how those measures are actually being applied, and what kind of situation they are creating for their victims. We find ourselves looking on a woeful spectacle of oppression—cold, cunning, complete, covering every part of social life, closing every door of escape, pursuing the innocent, the helpless, the humble, the educated, even the illustrious members of the persecuted race with a merciless boycott from the cradle to the grave. The bitter words of the preacher of Israel rise to the memory:

<sup>1</sup> *The Yellow Spot* (published by Victor Gollancz, 1936).

'Then I returned and saw all the oppressions that are done under the sun; and behold the tears of such as were oppressed, and they had no comforter; and on the side of their oppressors there was power, but they had no comforter. Wherefore I praised the dead which are already dead more than the living which are yet alive; yea, better than them both did I esteem him which has not yet been, who has not seen the evil work that is done under the sun.'

It is no matter for astonishment that among German Jews suicides are now numerous.

I find it difficult to discover in the records of persecution, many and sombre as they are, anything quite equivalent to the persecution of the Jews which now proceeds in Germany. The nearest parallel is the persecution of the early Christians by the Pagan Empire of Rome, but that was directed against a novel sect which had no roots in history, and which professed principles which did certainly conflict with the legal requirements of Roman citizenship. How different is the case of the Jews! They have been resident in Germany for centuries: they have made rich contributions to German science, art and literature; their expulsion from Germany empties the Chairs of the German Universities of many of their most distinguished Professors, and inflicts on German Society a far-extending dislocation. In the Great War the German Jews fought and fell on the stricken fields East and West alongside their fellow-citizens. In order to make possible the present persecution, it has been necessary deliberately to recreate in the German People the mentality of the Middle Ages. In those times of brutal ignorance and childish credulity the Jews inevitably aroused against themselves the darkest suspicions of the one, and the fiercest resentments of the other. Nothing was too horrible to be suspected; nothing was too incredible to be believed. But then persecution could consist with sincerity in the persecutors for it might seem to be demanded by religion. But to-day? Modern Germany has stood in the van of intellectual movement, and has repudiated the restraints of traditional Christianity more completely than any other community in Christendom. It is impossible in the case of modern Germans to offer the medieval excuses for this resuscitation of medieval barbarism. A new principle of persecution has had to be discovered. Not religion but race has provided the requisite plea. No longer the error of the mind, but the poison of the blood is to stamp the Jew as unsafe for German citizenship! A pseudo-scientific hallucination, which every modern educated man knows to be such, has been propagated with such energy that public opinion in Germany has been generally perverted, and the conditions of limitless oppression have been created. In their timely and unanswerable volume, *We Europeans*,<sup>1</sup> Messrs. Julian Huxley and A. C. Haddon have, we may hope, killed the mischievous fallacy which is now working such havoc in our modern world:

<sup>1</sup> *v. We Europeans*, p. 287.

'Meanwhile,' so runs the final paragraph, 'science and the scientific spirit can do something by pointing out the biological realities of the ethnic situation, and by refusing to lend her sanction to the absurdities and the horrors perpetrated in her name. Racism is a myth, and a dangerous myth at that. It is a cloak for selfish economic aims which in their unclad nakedness would look ugly enough. And it is not scientifically grounded.'

Yet this baseless fiction is propagated, and its practical interferences ruthlessly insisted upon, by the present rulers of Germany.

It is urged in some quarters that, however grievous the treatment of the 'non-Aryans' in Germany may be, the subject lies outside our legitimate concern. Germany must be free to take her own course, and to solve her domestic problems without interference from outside. There are, however, limits to the application of this reasonable argument. Nations cannot live in isolation: and their membership of the comity of civilised peoples imposes on them some obligations, which they cannot be suffered to repudiate. The oppression of the German Jews and other 'non-Aryans' is raising formidable difficulties for Germany's neighbours. Mr. McDonald justly emphasises this point:

'The growing sufferings of the persecuted minority in Germany and the menace of the growing exodus call for friendly but firm intercession with the German Government, by all pacific means, on the part of the League of Nations, of its Member-States and other members of the community of nations.'

'Pity and reason alike must inspire the hope that intercessions will meet with response. Without such response, the problems caused by the persecution of the Jews and the 'non-Aryans' will not be solved by philanthropic action, but will continue to constitute a danger to international peace and a source of injury to the legitimate interests of other States.'<sup>1</sup>

The wardship of the fundamental assumptions of Civilisation, as it has come to be understood in modern Europe, is the common concern of all civilised communities, for if the repudiation of those assumptions can prevail unchecked anywhere it will surely in the end endanger their authority everywhere. The solidarity of modern Civilisation is jeopardised by the persecuting policy of Germany. It is no smaller issue than that which now confronts the nations.

Lincoln's famous summary of the internal dissension in the United States which finally matured in the American Civil War, is not without relevance to the situation which has been created in Europe:

'A house divided against itself,' he said, 'cannot stand. I believe this Government cannot endure half slave and half free. I do not expect the house to fall, but I expect it will cease to be divided. It will become all one thing or all the other.'<sup>2</sup>

I cannot believe that the hysterical nationalism which has swept

<sup>1</sup> *v. Letter of Resignation*, p. ix.

<sup>2</sup> *v. Cambridge Modern History*, vii, 437

over Germany, violating fundamental principles of civilised human intercourse, and openly menacing the peace of the world, will continue much longer. It is certain that Germany contains a vast multitude of citizens who secretly abhor the barbarities which they are compelled to witness, and in some sense to inflict. We are assured that the Nazi régime is maintained by the Young, and regarded with dismay and dislike by the Old. Certainly it possesses the well-known characteristics of Youth—precipitate and ruthless logic, fierce intolerance, contempt for the lessons of experience, recklessly thorough-going methods. But, even so, there is ground for hope. Youth is generous, quick to learn, quick to unlearn, frank in its repentance, eager to make amends for its wrong-doing. As one who has had rather special reasons for holding Germany in high regard, who has an unfeigned admiration for her intellectual achievements, who has often in the past visited with delight her historic cities, and recalled the wonders of her history, I cannot bring myself to believe that the persecution of minorities, and among them specially of the Jews, which now stains the national name, can be more than a passing aberration. The publication of this book will, I think, hasten the return of sanity by making yet more vocal and insistent the protest of the civilised conscience itself, that protest which not even the most passionate nationalism can permanently resist or will finally resent.

Signed: Herbert Dunelm.

Auckland Castle,  
February 12th, 1936.

But one fact must be emphatically stressed. *All these clinicians, scientists and biologists who supported Hitler's racial doctrine have forfeited for all time the right to be considered reliable representatives of Medicine and Science. The aim of Science is the search for truth. Supporters of lies can never be regarded trustworthy, but can only be considered upholders and abettors of all the crimes committed by the national socialists.*

As an instance of this Germanic *volte-face*, let me quote the Introduction to the second edition, issued in 1936, of Gustav von Bergmann's book, *Funktionelle Pathologie*, first published in 1932. This work had aroused my sincerest admiration and I was, therefore, profoundly shocked to find in the second edition the insertion of the following Nazi-inspired words:

'Wir stehen im neuen Deutschland in einer umwälzenden Epoche, die den Arzt stärker für das allgemeine Wohl verpflichtet. . . .

'Unser Reich bemüht sich in heroischen Gesetzen um einen erbgewundenen Nachwuchs und verbietet blutfremde Kreuzungen. Damit steht die Erblehre ganz anders im Vordergrund für uns Ärzte wie einst.

'Gesundheit und Gesundung zu fördern und zu schützen für den Menschen und unser Volk, dem wir vor allem dienen, ist die grosse

beglückende etische Aufgabe der sich der kommende Ärztstand in Deutschland mit einem heiligen Eifer widmen soll, um womöglich die grossen Leistungen der Vergangenheit, die der deutschen Medizin Weltgeltung verschafft haben, noch zu übertreffen.'<sup>1</sup>

Why did a man like Bergmann not protest against the ridiculous Hitlerite attitude? As one of the most prominent clinicians of Germany he, in collaboration with all the other leading physicians and directors of medical clinics, should immediately have protested against the persecution of all their Jewish colleagues and collaborators. If such a step had been taken Hitler could not have succeeded.

As a further instance, let me analyse the opening speech of Professor Schittenhelm at the Wiesbaden Congress of Internal Medicine. It should be remarked that this Congress was in the habit of meeting every year at Wiesbaden. In 1932 the German Society of Internal Medicine celebrated its 50th anniversary, upon which occasion it elected Professor Lichtwitz of Berlin to be the Chairman for the next year's Congress. The Congress of 1933 met on April 18-21, immediately after Hitler came to power. Let me quote the following illuminating words from the opening speech of the newly elected Chairman, Professor Schittenhelm of Kiel:

'Die heutige Tagung steht am Beginn einer neuen Ära. Die gewaltigen Umwälzungen welche die in voller Auswirkung begriffene Nationale Revolution mit sich bringt haben auch unsere Gesellschaft ergriffen. Der für die diesjährige Tagung gewählte Vo. sitzende, Herr Lichtwitz, hat in Würdigung der veränderten Verhältnisse die Leitung abgegeben.'<sup>2</sup>

<sup>1</sup> This new Germany is living through a period of upheaval, in which increased demands on behalf of the general welfare are being made on the physician. . . . Our Reich is endeavouring to formulate heroic laws to ensure a sound progeny, and has forbidden all anti-racial admixtures. Thereby the science of Heredity assumes for us physicians a priority of consideration very different from that which was hitherto the case.

To promote and protect the health and improved condition of human beings and of our nation, whose servants above all we are, is the great, inspiring and ethical task to which the rising generation of doctors in Germany must dedicate themselves with holy zeal, in order that they may even exceed the great accomplishments of the past, which have conferred upon German Medicine a world-wide renown.

<sup>2</sup> The meeting of to-day coincides with the beginning of a new era. The mighty upheavals attendant upon the active accomplishment of the National revolution have also affected our Society. In compliance with the changed conditions now obtaining, Herr Lichtwitz, the Chairman elected for this year's Congress, has resigned his leadership.



A commentary should be added to this historic statement. Professor Lichtwitz was a Jew who, it may be mentioned, later went to New York, where he assumed the position of chief physician at the Montefiore Hospital. As one of the most outstanding clinicians in Germany he had in the previous year been elected Chairman of this Congress of Internal Medicine.

But the significant fact in connection with his forced resignation lies in the circumstances that this step was simply taken for granted, instead of being indignantly opposed by the united assembly of the society. This episode most unmistakably indicates, therefore, the attitude adopted by the representatives of German Medicine even at the very outset of the so-called 'new era'.

But Schittenhelm went even a step further by stating '*Überall weht Morgenluft*' (Everywhere there blows a morning wind). He designated as 'the dawn of a new era' the barbaric steps taken by the Nazis, the establishment of concentration camps, the burning of all Jewish literature, the complete eradication of famous names, such as Ehrlich, Neisser, Minkowski, Wassermann. All these names and many others which have shed glory on the History of Medicine, as on all other spheres of culture, were termed by Schittenhelm *fremdstämmig* (anti-racial). He would have been more correct in saying '*Überall weht Mörderluft*' (Everywhere there blows a murderous wind). But let me quote yet another paragraph from this famous introductory speech. Schittenhelm said:

'Es ist mir ein Bedürfnis von dieser Stelle aus zu erklären, dass die kürzlich eingeleitete Hetze des Auslandes deutschfeindlichen Motiven entsprang, und jeder sachlichen Grundlage entbehrte. Auch nach den Erfahrungen des deutschen Ärztestandes muss sie als gehässig, masslos und unwahr bezeichnet werden.'<sup>1</sup>

By this statement Herr Schittenhelm therefore pronounced as 'untrue' the placing of politicians and Jews in concentration camps. Was it 'untrue' that Professor Lichtwitz was compelled to resign his Chairmanship at this Congress and, like other famous Jewish doctors, had to leave his home country and seek refuge abroad? Was it 'untrue' that the whole schedule of this Congress, as stated by Schittenhelm himself, had to undergo several changes,

<sup>1</sup> I feel an urgent desire to declare from this place that the provocation recently initiated abroad was prompted by anti-German motives and was entirely unfounded. Moreover, in accordance with the experiences of the German medical profession, it must be designated as odious, immoderate and untrue.

because the report on the Suprarenal Problem had to be cut out, having been assigned to a Jewish specialist? Was it 'untrue' and only due to maliciousness that the foreign press discussed and criticised the decrees of April 1st, 1933, in accordance with which all Jewish doctors were forbidden to practise and had their professional plates decorated with the yellow stripe? Were the facts about the burning of the Reichstag and all the other atrocities also 'untrue'? Such a statement as that made by the Chairman of the German Society of Internal Medicine clearly proves that its members fully supported the Hitlerite doctrines and practices. Schittenhelm announced verbally:

'Unsere Gesellschaft hat die Pflicht und den Willen den nationalen Aufbau auch ihrerseits intensiv zu fördern. Ein besonders im Ausland heftig angegriffenes Ziel unserer Regierung ist, wie der Reichskanzler, Adolf Hitler, den Ärztevertretern kürzlich erklärte, die Reinigung des Volkes und namentlich der intellektuellen Schichten, von fremdstämmigem Einfluss und rassenfremder Durchsetzung, damit das deutsche Kultur- und Geistesleben wieder dem natürlichen Ansprüche Deutschlands auf arteigene geistige Führung gerecht werde.'<sup>1</sup>

As a final illuminated witness to the glories of Nazism I cannot omit mentioning Professor Eppinger, the successor to the late Professor Wenckebach as Director of the First Viennese Medical Clinic. Eppinger was a pupil and assistant of von Noorden, and in that capacity worked in collaboration with all the other assistants, many of them Jews. Moreover, when he became the Director of the Vienna clinic his first three assistants were Jews, Popper, Kaunitz and Faltitschek. In 1937, a year before Hitler invaded Austria, Eppinger wrote a book, in collaboration with these assistants, to commemorate the 150th anniversary of the Vienna *Allgemeines Krankenhaus*.

<sup>1</sup> Our Society has also the duty and the will to lend its efforts towards the intensive promotion of the nationalistic programme. As the Reich Chancellor, Adolf Hitler, recently stated before the representatives of Medicine, one of the aims of our government, that has met with particularly violent hostility abroad, is to purify the race, and more particularly to liberate the intellectual classes from anti-racial influences and alien penetration, to the end that the cultural and spiritual life of Germany, under the guidance of native intellectual leadership, may once more further the natural claims of Germany.

THE VIENNA SCHOOL OF MEDICINE  
*Its Development and New Tasks under the Third Reich*

by  
Professor Dr. Hans Eppinger

Within the framework of an extensive state, like that of the Austro-Hungarian monarchy, it was inevitable that the capital was the centre not only of administration, but also of all cultural affairs. That state, consisting of a number of different nationalities whose centrifugal tendencies were determined by the racial character of its subjects, possessed in the existence of its cultural centres and in its dedication to Art and Science a factor which might be expected to promote some measure of unity. If therefore, in compliance with necessity rather than through a personal urge, it became customary to direct particular attention to the Viennese advanced schools of learning, the object was attained that persons from the eastern provinces of the monarchy in particular resorted here for cultural education. As a result the University of Vienna actually acquired a position of special cultural significance in the work of fomenting the spirit of Germanism in the East, for the very reason that the culture here pursued was pre-eminently German in character. This condition was not merely based on the fact that our scientific trends in no way differed from those of the German Empire and that there existed between the two countries numerous bonds of mutual co-operation; but it was due also to the circumstances that a great number of prominent teachers, particularly of the Faculty of Medicine, had been summoned from the Reich to make their second home in our city. (It suffices to mention Billroth and Nothnagel.) And in exchange Vienna filled the vacancies in many universities of the German Empire with prominent men of its own city.

From time to time the University of Vienna, in particular the Medical School, was fully cognisant of the fact that it was providing the regions of the east with these cultural elements. This institution was particularly adapted to do this, for the reason that for many decades and even centuries it had possessed in its midst many eminent individuals who through their noteworthy contributions to Medicine have permanently enriched the annals of Science.

*Vienna, a Centre of the Medical World.*

After the higher institutions of learning had successfully freed themselves from the confining restrictions of jesuitical control and had thereby established the basis for free instruction and research, the medical faculty soon became important as a scientific centre. But it was the generosity of Van Swieten that laid the first foundation of that stupendous development which, starting with the establishment of the first clinic to be created in any German-speaking state, next proceeded,

as a result of the genius of Peter Frank, to the attainment of that position of scientific leadership which is identified with the names of Skoda and Rokitsansky. Subsequently the Faculty had the good fortune to command the service of a large number of distinguished research workers and teachers who not only crowned with fulfilment what had previously been laboriously acquired, but also blazed out new trails in all directions and established new foundations which served to lay the basis for quite new departments in Modern Medicine. But they went even further: they themselves built up the essential lines upon which these new branches of Medicine should operate.

Conditions being such it was inevitable that Vienna should become a focal centre of the medical world, to which patients flocked for treatment from every part of the world, and whither students eagerly resorted from foreign countries to take advantage of the excellent opportunities offered by the distinguished specialists resident in this city. Thus the medical faculty was and remained one of the few noteworthy features of a state which in other respects was doomed to hopeless downfall.

But even in this domain it was possible for the observant eye of the politician trained to note cultural changes to detect, as far back as the close of the XIXth century, a threatening and significant menace to Viennese Medicine, viz. the steady encroachment of the Jewish element. Even in Billroth's time it was becoming apparent that this great physician felt compelled to give serious warning of this danger. But like all such warnings this one was also disregarded. It was the Aryans who had been exclusively involved in founding this school and in developing it to its prominent international position. But as everywhere in the world, wherever anything great has been created by the Aryan spirit, the Jews hastened up to reap the benefits of the labours of others. Thus it happened that after a few isolated Jews had first penetrated into the faculty, their number increased so greatly as to attain alarming proportions.

#### *Phenomena of Downfall.*

Neither the government of the monarchy, nor the blessed times of the democracy had the power or even the intention of combating such a development. At the breakdown of the Austro-Hungarian Empire these unhealthy conditions had already reached a terrible degree of expansion. The new state of St. Germain was a ridiculous rump formation, which would only have been able to maintain the standard of its high schools if it had recognised their value and in particular their Germanic mission, and if it had been willing to sacrifice everything in order to preserve and if possible to strengthen this centre of cultural radiation. It should also have recognised that no sacrifice should have been too great in order to preserve such centres. But nothing of the kind occurred. No effort was made to draw students from the dependent provinces and the regions of the south-east, and those who did

come were not sufficiently supported in their enterprise. But the great error made was that these Germans from the dependent provinces who were always glad to come, not only received no support toward their special training, but were given no valuable opportunities of furthering their nationalistic contributions. And even in those cases where the high schools did make such an effort they never met with sufficient understanding on the part of the government. Their budgets were steadily decreased, with the result that gradually they were hardly able to maintain their activities at all, even on a modest scale.

The work of filling the university chairs, and particularly the task of assuring adequate scientific training for the younger generation, suffered the misfortunes attendant upon all other conditions in the diminutive cramped state, namely of ceasing to be envisaged as a great national duty, being conducted exclusively from the point of view of petty politics. Such a state of affairs therefore, through lack of the necessary material support, on the one hand, and the active promotion of the inefficient, on the other, was the surest way of destroying everything in Vienna, including the exalted position enjoyed by Medicine. Needless to say that the more obvious these symptoms of destruction became, the more did the Jewish element expand, for owing to its additional financial power it was more and more able to oust the impoverished German students from the university halls.

That which was started under the democracy was naturally pursued with increased zest under the so-called authoritarian state. Even before that time there had been apparent a gradual decline in the registration from those foreign countries from which we had hoped to enrol our students. But this decline was at first counterbalanced by a highly welcome influx of German students from the Reich, who began to flock to the *Ostmark* in steadily increasing numbers. However, this development received a sudden check by the Dollfuss régime. The circumstance that subsequently Jews poured into our city from every other country and that it was the undesirable emigrants in particular who flaunted themselves, did not benefit us either morally or financially. The state funds were needed for 'much more important' objects, and so little remained for the higher schools of learning that the matter was even mentioned in the state council (Parliament),—sufficient evidence of the pernicious state of affairs. If despite these handicaps this school still continued to produce definite contributions, in part of a very high standard, this is merely an evidence of its unsurpassed vitality; but these good results were achieved in spite of every obstacle and without any kind of external assistance.

Thus Vienna and with it her medical school ran the danger of gradually but inevitably losing her important position and of declining from being a brilliant centre which practised and promoted the highest scientific standards and encouraged genuine German culture to the status of a provincial university, threatened to become the playground of Jewish intellectualism.

*Rebirth under the Third Reich.*

The action of the Führer has also established basic changes in this domain. After having thoroughly purged Vienna of all the unhealthy elements, the Medical School will in future again be able unimpeded to devote itself joyfully and enthusiastically to the great work of its best representatives of which it has never lost vital consciousness. Not only will it bend all its efforts to maintaining and increasing its scientific reputation, but it will again fulfil its racial and cultural mission, that of widely propagating the German spirit. At length it will be completely equipped with working places, long needed, and so will be able to make up for what was neglected under the 'System'. In addition it will place at the disposal of the young physician in the Third Reich all the facilities needed to carry on his work, and by the resumption of scientific research, associated with accuracy in instruction, it will once more arouse the interest of all persons zealous for thorough medical training. Thus, as an outpost in the south-east, it will again clearly recognise its true mission, accept its responsibility, and carry it out to the best of its ability.<sup>1</sup>

<sup>1</sup> DIE WIENER MEDIZINISCHE SCHULE, *ihre Entwicklung und ihre neuen Aufgaben im Dritten Reich*—von Professor Dr. Hans Eppinger.

Im Rahmen eines weiträumigen Staates, wie es die Oesterreich-Ungarische Monarchie war, musste die Hauptstadt naturgemäss nicht nur das Zentrum der Verwaltung, sondern auch das aller kulturellen Einrichtungen sein. In dem Vielvölkerstaat, dessen zentrifugale Tendenzen durch das Volkstum der Untertanen bedingt waren, sah man in den Kulturzentren, in der Pflege von Kunst und Wissenschaft ein Moment, von dem man noch vielleicht irgendetwas Einigendes erwarten konnte. Wenn man daher, vielleicht mehr der Not gehorchend als dem eigenen Triebe, der Hochschule in Wien ein besonderes Augenmerk zuwandte, so erreichte man damit, dass besonders die östlichen Völker der Monarchie hierher kamen, um sich ihre Bildung zu holein, und so die Wiener Universität tatsächlich für die kulturelle Sendung des Deutschtums im Osten von einer ganz grossen Bedeutung wurde, eben deshalb, weil die hier gepflegte Kultur eine deutsche war; dies fand nicht nur darin seinen Ausdruck, dass die Wissenschaftliche Richtung durch nichts von der des Deutschen Reiches unterschieden war, und die Fäden, die von hier nach dort gingen, zahlreich und eng verknüpfend waren, sondern auch darin, dass eine grosse Anzahl ganz bedeutender Lehrer gerade an die medizinische Fakultät aus dem Reiche berufen wurden und hier ihre zweite Heimat fanden—es sei nur an Billroth und Nothnagel erinnert—, wie anderseits auch immer das Reich wieder aus Wien junge Kräfte an die deutschen Lehrstühle rief.

Zeitweise hat die Wiener Universität, insbesondere auch die Wiener medizinische Schule, diese kulturelle Sendung für den Südostraum mit

When in March, 1939, this article was sent to me by a friend in Vienna I immediately wrote the following letter to Professor Eppinger in Vienna.

5 Courtfield Gardens,  
London, S.W.

April 7, 1939.

Herr Professor Eppinger,

You will be surprised to receive a letter from me in exile, but I am urged to inform you that I have just received your article in the *Neuer Wiener Tageblatt*, which I have read with profound astonishment.

I recall the time when you repeatedly sought the opinion of my teacher Frankl von Hochwart (a Jew), who introduced you also to the

vollem Bewusstsein erkannt und erfüllt. Sie konnte das um so mehr als durch Jahrzehnte, ja durch Jahrhunderte an ihr Kräfte wirken, die sich für all Zeiten in die Geschichte der Heilkunde eingetragen haben.

*Wien, ein Mittelpunkt der Medizinischen Welt.*

Die Fakultät selbst hatte bald nachdem sich die Hochschule aus der Beengung jesuitischer Führung herausgefunden und damit die Voraussetzung für freie Lehre und Forschung geschaffen hatte, begonnen, ihre naturwissenschaftliche Bedeutung zu gewinnen. Durch die Grosstat Van Swietens aber erst wurde die Grundlage für jene grandiose Entwicklung gelegt, die mit der Errichtung der ersten Klinik im deutschen Sprachgebiet überhaupt beginnend, über die Organisation der Volksgesundheit durch das Genie Peter Franks hinführte zu jener wissenschaftlichen Bedeutung, die durch die Namen Skoda und Rokitsansky angedeutet wird. In der Folge hatte die Fakultät das seltene Glück, über eine ganz grosse Anzahl hervorragender Forscher und Lehrer zu verfügen, die nicht das Ueberkommene vervollkommneten, sondern überall neue, zum Teil grundlegende Wege gingen, ja für ganze Disziplinen der modernen Heilkunde den Grundstein legten; mehr als das: sie schon in ihren wesentlichsten Grundzügen ausbauten.

Es musste nach dieser Lage der Dinge eine Selbstverständlichkeit werden, dass Wien zu einem Mittelpunkt der medizinischen Welt wurde, der ebenso Kranke aus aller Herren Ländern veranlasste, hieher zu kommen und Heilung zu suchen, wie auch Studenten aus der ganzen Welt es nicht versäumen wollten, ihre Ausbildung bei so hervorragenden und berühmten Lehrern zu geniessen. So war und blieb die medizinische Fakultät tatsächlich eine der wenigen erfreulichen Erscheinungen in einem sonst rettungslos untergehenden Reich.

Allerdings zeigte auch diese für das geschärfte Auge des Kulturpolitikers schon damals, begginnend mit dem Ende des XIX Jahrhunderts, eine bedrohliche und sehr besorgniserregende Erscheinung, nämlich die immer mehr um sich greifende Verjudung der Wiener Medizin. Schon zu Billroths Zeiten begann sie so sehr in den Vorder-

study of Neurology. I remember that you were in intimate contact with the Pharmacological Institute and constantly consulted Professors E. P. Pick and Froehlich, both Jews.

And what about your last assistants? Did not Popper and Kaunitz contribute most of your scientific work? Did you not, as late as 1937, in conjunction with your assistants Dr. Popper and Dr. Kaunitz offer

grund zu treten, dass sich dieser grosse Arzt veranlasst sah, mit ausserordentlich ernstesten Worten auf diese Gefahr hinzuweisen. Wie alle derartigen Warnungen, ist auch diese ungehört verhallt. Arier waren es ausschliesslich, die diese Schule gegründet und zu ihrer weltbedeutenden Höhe geführt hatten. Aber wie überall, wo arischer Geist geschaffen hat, kamen auch hier die Juden, um Nutzniesser seiner Leistungen zu werden. So kam es, dass, nachdem zuerst einige von ihnen in die Fakultät eingedrungen waren, ihrer schliesslich immer mehr und mehr wurden bis zu einem erschreckenden Ausmass.

### *Erscheinungen des Niederganges.*

Weder die Regierung der Monarchie noch die gesegneten Zeiten der Demokratie waren imstande oder hatten auch nur die Absicht, einer solchen Entwicklung zu wehren. Als Oesterreich-Ungarn zusammenbrach, hatten sich diese ungesunden Zustände bereits furchtbar weit forentwickelt. Der neue Staat von St. Germain war ein lächerliches Rumpfsgebilde, das seine Hochschulen nur dann in ihrer Bedeutung hätte erhalten können, wenn er ihren Wert und insbesondere ihre deutsche Sendung erkannt und alles darangesetzt hätte, den geistigen Ausstrahlungsraum zu bewahren und womöglich zu vertiefen. Es hätte auch erkennen müssen, dass zur Erhaltung solcher Stätten kein Opfer zu gross sein dürfte. Nichts von alldem geschah. Man bemühte sich nicht, aus den Nachfolgestaaten und dem weiteren Südosten Hörer heranzuziehen, beziehungsweise unterstützte man ihr Kommen nicht genügend. Ganz besonders aber hatte man schon gar nichts dafür übrig, den Deutschen aus den Nachfolgestaaten, die immer noch gern hieher gekommen wären, diese nicht nur für ihre völkische Belange wichtige Möglichkeiten zu schaffen. Soweit die Hochschule selbst um all diese Dinge bemüht war, fand sich niemals das nötige Verständnis und die entsprechende Unterstützung von seiten der Regierungen. Budgetmässig wurde sie immer mehr und mehr gekürzt, so dass sie allmählich kaum mehr imstande war, ihren Betrieb auch nur in bescheidenerem Umfang zu erhalten.

Die Besetzung der Lehrkanzeln und insbesondere die Sorge für den wissenschaftlichen Nachwuchs wurde vielfach, wie alles in diesem verkrampften Kleinstaat, nicht mehr aus der Weite einer grossen völkischen Aufgabe gesehen, sondern ausschliesslich nach kleinlichen, parteipolitischen Gesichtspunkten betrieben. Damit war das System auf dem besten Weg, nicht nur durch den Mangel an den notwendigen materiellen Unterstützungen, sondern auch durch bewusste Förderung



your excellent book on Serous Inflammation in celebration of the 150th anniversary of the *Allgemeines Krankenhaus*? Your book on Hepatic Diseases was chiefly the work of your assistants, and I personally was a witness of the fact that Dr. Faltitcek not only corrected your entire manuscript, but also wrote much of it himself; and he moreover had the labour and honour of correcting the proofs. I need not mention

unfähiger Kräfte, wie alles, so auch die Bedeutung des medizinischen Wien zugrunde zu regieren. Ueberflüssig, zu sagen, dass je mehr solche Erscheinungen des Niederganges sichtbar wurden, um so mehr sich das Judentum breitmachte, das auch durch seine finanzielle Stärke imstande war, die verarmten Studenten immer mehr aus den Hörsälen zu verdrängen.

Was in der Demokratie begonnen war, wurde im sogenannten autoritären Staat natürlich um so eifriger fortgesetzt. Schon vorher war ein allmähliches Sinken der Inskriptionsziffer aus dem uns erwünschten Ausland festzustellen. Aber dieser Ausfall wurde zunächst wettgemacht durch den überaus erfreulichen Zustrom reichsdeutscher Studenten, die in immer grösserer Zahl in die Ostmark zu kommen begannen. Durch das Regime Dollfuss wurde diese Entwicklung jäh beendet. Dass später aus allen Herren Ländern Juden hieherkamen und insbesondere sich üble Emigranten breit machten, hat weder moralisch noch auch nur finanziell genützt. Die Staatsausgaben waren nun für viel 'wichtigere' Zwecke notwendig, für die Hochschulen blieb so wenig übrig, dass sogar im Staatsrat darüber gesprochen wurde, wohl ein Beweis dafür, wie arg die Dinge lagen. Wenn doch noch Leistungen, und zum Teil hervorragende Leistungen, vollbracht wurden, so spricht dies nur für die unerhörte Lebenskraft dieser Schule, aber es geschah dies trotz alledem und ohne Förderung.

So war Wien und seine medizinische Fakultät in die Gefahr gekommen, seine Bedeutung allmählich, aber sicher zu verlieren und aus einer Stätte wissenschaftlichen Glanzes und Pflege bester deutscher Kultur zu einer Binnenuniversität herabzusinken, die zum Tummelplatz jüdischer Intellektualismus zu werden drohte.

### *Erneuter Aufstieg im Dritten Reich.*

Die Tat des Führers hat auch hier grundlegenden Wandel geschaffen. Nachdem alles Ungesunde gründlich beseitigt ist, wird sich nun die Wiener medizinische Schule in Zukunft wieder ungehemmt ihrer grossen Aufgabe, die ihren besten Vertretern immer in lebedigstem Bewusstsein blieb, mit Freude und Begeisterung hingeben. Sie wird nicht nur alle Kräfte dafür einsetzen, ihren wissenschaftlichen Ruf zu halten und zu mehren, sie wird auch wieder im Rahmen des grossen Reiches ihre völkische und kulturelle Sendung erfüllen und deutschen Geist weithin verbreiten. Sie wird nun endlich ausgerüstet werden mit neuen, schon längst notwendig gewordenen Wirkungsstätten, und so wird nachgeholt werden, was das System versäumt hat.

how frequently you carried on detailed discussions with me personally on various scientific problems.

The investigations connected with the electrostatic groups in their relation to pathologic problems interested you so profoundly that you selected this subject for your dedicatory speech, as an act of homage to Nothnagel. Moreover I believe that even to-day you are still in touch with Rudolf Keller in Prague, to whom you are indebted for all your latest research. Or should it be that you have suddenly changed your view regarding the significance of the electrostatic groups because Rudolf Keller is a Jew (a fact of which you were always aware), and because these theories would consequently be 'unbearable' in your new *Reich*? May I venture to remind you, Herr Eppinger, that you never declined either to see Jewish patients, nor to be called into consultation by your Jewish colleagues. Neither did you hesitate to accept the fees of any Jews.

Herr Professor Eppinger, is it possible that you have forgotten all your indebtedness to your former associates? Have your Jewish colleagues, Professors Halbarn, Marburg, Redlich, Pineles, Heinrich Neumann, and others, really contributed to the downfall of the Viennese Medical School? Can you to-day wish to deny the international reputation of Professor Heinrich Neumann, and was it not he who attracted most of the foreign patients to Vienna? Who was it who built your marvellous clinic, and who contributed the money for the reconstruction of all the other modern clinics? Was it not the old Austria, that ancient dynasty upon which to-day you cast scorn? And was it not the Austrian Republic that distinguished you by calling you to Vienna?

In one point you are certainly right. We all of us felt that the Viennese Medical School was undergoing a decline when you were summoned to Vienna to take over the chair once so gloriously filled by such men as Nothnagel, von Noorden and Wenckebach.

Herr Eppinger, I would have expected anything from you than the shamelessness revealed in your article. But believe me, Herr Eppinger, the last word in the history of mankind has not yet been spoken. I do not believe that you will ever again have the courage to show your face at any international conference. I await the moment, should you have this effrontery, to make this article of yours generally public.

I continue to live on, as you see, and am blessed to be in England,

Sie wird ebenso der Ausbildung des jungen Arztes im Dritten Reich alles zu Verfügung stellen, was die ihm gestellten Aufgaben fordern, wie sie auch durch die Pflege der Forschung und die Exaktheit der Lehre wieder das Interesse aller derer wecken wird, die an einer gründlichen medizinischen Ausbildung interessiert sind. So wird sie—vorgeschoben in den Südosten—ihre Sendung neuerdings mit hellem Bewusstsein erkennen, als verantwortungsvolle Aufgabe empfinden und mit allen ihren Kräften pflegen.

in a free country, free to breathe, to think and to speak. I am firmly convinced that History has not pronounced her final word, and that sooner or later Truth will triumph over Lies, Humanity over Barbarism, Faith over Paganism. 'And what you are, you owe to others.' Should not these immortal words of Goethe apply also to you? You yourself best know to whom you are indebted.<sup>1</sup>

Dr. Erwin Pulay.

<sup>1</sup> Herr Professor Eppinger,

Sie werden überrascht sein von mir aus dem Exil einen Brief zu erhalten, aber ich fühle mich veranlasst Ihnen mitzuteilen dass ich Ihren Artikel in dem Neuen Wiener Tageblatt eben eingeschickt erhielt und mit höchstem Erstaunen gelesen habe.

Ich erinnere mich der Zeit in der Sie wiederholt Rat gesucht haben bei meinem Lehrer Frankl von Hochwart, der auch Sie in die Neurologie einführte (Jude). Ich erinnere mich, dass Sie im innigsten Kontakt standen mit dem Pharmakologischen Institut und stets bei Prof. E. P. Pick und Froehlich (Juden) Rat holten.

Und was ist mit Ihren letzten Assistenten? Haben nicht Popper, Kaunitz die meiste wissenschaftliche Arbeit für Sie getan? Haben Sie nicht noch 1937 Ihr ausgezeichnetes Buch über die *Seroese Entzündung* gemeinsam mit Ihren Assistenten Dr. Popper und Dr. Kaunitz zu Ehren der 150 jährigen Feier des Allgemeinen Krankenhaus gewidmet? Ihr Buch über Lebererkrankungen war hauptsächlich der Mitarbeit Ihrer Assistenten zu danken und ich war Augenzeuge wie Dr. Falitcek ihr ganzes Manuskript, nicht nur korrigierte, sondern zum grössten Teil selbst schrieb und die Druckbogen zu redigieren die Mühe und Ehre hatte. Ich habe nicht zu erwähnen wie oft Sie wissenschaftliche Fragen eingehend mit mir besprochen haben.

Die Forschung über die elektrische Gruppentheorie in Beziehung zu pathologischen Problemen hat Sie so sehr interessiert, dass Sie Ihren Festvortrag zu Ehren Nothnagels diesem Thema widmeten. Uebrigens glaube ich dass Sie selbst heute noch in Kontakt mit Rudolf Keller in Prag stehen, dem Sie ja alle Ihre neueste Forschung verdanken. Oder sollten Sie plötzlich Ihre Ansicht über die Bedeutung der elektrostatischen Gruppen geändert haben, weil Rudolf Keller, was Sie übrigens immer wussten, ein Jude ist, und daher in Ihrem neuen Reich 'untragbar'? Darf ich daran erinnern, Herr Eppinger, dass Sie niemals ablehnten, weder jüdische Patienten zu sehen, noch mit jüdischen Kollegen zu *Konsilien* zu gehen, oder sich scheuten das Honorar dieser Juden anzunehmen.

Herr Professor Eppinger, haben Sie wirklich vergessen was Sie allen Ihren früheren Mitarbeiter zu verdanken haben? Haben Ihre jüdische Kollegen, die Professoren Halbarn, Marburg, Redlich, Pineles, Heinrich Neumann, und andere, wirklich zum Niedergang der Wiener Medizinischen Schule beigetragen? Wollen Sie heute vielleicht Prof. Heinrich Neumann seine Weltgeltung absprechen, und war er es nicht

I sent this letter registered to Professor Eppinger. Here, then, was one of our leading clinicians who had become a traitor to his country, and to the Vienna Medical School to which he owed everything, as did we all; to this medical school which was founded by the old Austrian dynasty and not by the Nazis.

## XVIII

## AFTER 1933

HAVING surveyed the whole situation as I have discussed it, we are now compelled to consider another aspect. I refer to the attitude shown by all the other countries when Hitlerism started to operate in Germany. International meetings continued to be held, at which the representatives of the Nazi system took their place in response to invitation. But at the same time many Germans of the medical and scientific professions, who from the outset had been opposed to the Nazi régime, were com-

der die meisten Ausländer nach Wien anzog? Wer hat Ihre wunderbare Klinik erbaut, und wer hat das Geld für den Neubau all der anderen modernen Kliniken gespendet? War es nicht das alte Oesterreich, jene alte Dynastie, die Sie heute bespeien? Und war es nicht die Republik Oesterreich die Sie auszeichnete und nach Wien berief?

In einem Punkt haben Sie gewiss recht: auch wir fühlten einen Niedergang der Wiener medizinischen Schule im Augenblick als Sie nach Wien berufen wurden um die Lehrkanzel nach Männern wie Nothnagel, von Noorden und Wenckebach zu übernehmen.

Herr Eppinger, ich hätte alles eher erwartet von Ihnen als die Schamlosigkeit die Sie in Ihrem Artikel offenbarten. Aber glauben Sie mir, Herr Eppinger, es ist noch nicht das letzte Wort in der Geschichte der Menschheit gesprochen. Ich glaube nicht, dass Sie den Mut haben werden sich jemals wieder an einer Internationalen Konferenz zu zeigen. Ich erwarte den Augenblick wenn Sie es wagen sollten zu erscheinen, Ihren Artikel der Oeffentlichkeit zu unterbreiten.

Ich lebe weiter, wie Sie sehen, und habe den Segen in England, einem freien Lande, frei zu atmen, zu denken und zu sprechen. Ich glaube fest daran, dass die Geschichte nicht ihr letztes Wort gesprochen hat, dass früher oder später Wahrheit über Lüge, Menschantum über Barbarismus, Glaube über Heidentum triumphieren wird. 'Und was Du bist, dass bleibst Du ändern schuldig.' Sollten diese ewigen Worte Goethes nicht auch für Sie gelten? Sie selbst wissen am besten in wessen Schuld Sie stehen.

Dr. Erwin Pulay.

pelled to remain in Germany, because, had they left the country, they would have been faced by the same difficulties which confronted the other refugees. Moreover, it was too much to expect that outstanding clinicians should give up their position, their sphere of activity, in order to undergo new examinations in foreign countries, knowing as they did that they would not obtain any position commensurate with their abilities.

If the foreign countries had opened their doors to all who opposed Nazism there is no doubt but that a great number of prominent scientists and other intellectuals would immediately have turned their backs upon Germany, and by this action would have been able to organise a centre abroad for the purpose of combating Hitlerism.

I therefore feel it to be my duty to emphasise that the attitude shown by the medical associations of all these countries represented a mortal blow struck at their colleagues from the oppressed countries. All the regulations they set up constitute an act of defiance against everything for which Medicine stands,—an act of defiance against the fundamental principle upon which the physician's task is based, namely, to be governed exclusively by his professional rule. In accordance with this rule every physician is compelled to give his advice to anyone who asks for his help, wherever this may be.

It was in order to emphasise this point that I have dealt at such length upon the ethical atmosphere which prevailed at the Vienna Medical School and why I so strongly stressed the important rôle played by the great continental schools of Medicine.

The attitude of exclusion adopted by the British Medical Association was published in the *British Journal of Medicine* of April 18th, 1942, in an article entitled 'The Alien Doctor Question'. Let me quote from it the following passage relating to the Austrian refugee physicians.

'... Beyond these two sides of the case there was another, to which the Association had to give heed, namely, the protection of the British public. Whatever sympathy is felt for an exile, an alien doctor could not be allowed to settle in practice without the assurance that he had become acquainted with the methods of dealing with patients and with the ethical standards prevailing here.'

I think that everyone familiar with the situation will agree with me that neither the ethical standards nor the methods of dealing with patients, as practised by physicians trained in the best continental schools of Medicine, have been such as to necessitate further training in order to attain the 'ethical standards' demanded

and adopted by Great Britain. I accordingly most emphatically protest against this statement, which I regard as an insult to our medical schools of the Continent.

But let me hasten to say that we foreigners are most profoundly grateful for all the many acts of hospitality which have been extended to us refugees. However, this is not the point at issue, and the principles here involved should be made generally applicable once this war is over. I have dwelt upon the practices which have always prevailed on the Continent in order to insist that an attitude such as that shown toward the refugee doctors must never again be permitted.

Of course I fully realise that in normal times the necessity of adhering to the letter of the law, with respect to alien non-admittance to the privileges of Great Britain and other countries, is understandable and perfectly justifiable. Nevertheless, *abnormal conditions and extraordinary circumstances call imperatively for extraordinary measures.*

It is absolutely unfair to demand that a specialist who has behind him many years of experience in medical centres, such as Berlin, Prague and Vienna, and who has written extensively on his particular subject, should cease to be regarded as a specialist but be compelled to undergo examinations in the whole realm of Medicine, like any new student. Why, for instance, should a prominent ear or skin specialist, who before the war was consulted by patients from every part of the world, suddenly have to undergo examinations in Anatomy, Surgery or Gynecology? If he was good enough to be regarded as a first-class specialist in any of the leading continental medical centres, why should his medical knowledge suddenly prove inadequate for this or any other country? Obviously there exist differences of opinion in medical matters, but it was precisely in order to have the benefit of his individual opinion that this particular authority was so widely consulted. Let me mention one instance of glaring injustice in substantiation of my argument.

It is a very well-known fact that the ear specialist, Professor Heinrich Neumann of Vienna, enjoyed a world-wide reputation. Not only was he consulted in Vienna by the most illustrious persons from every part of the world, but he was also frequently called for consultation to other countries, including England and the United States. In a letter dated July 22nd, 1938, Professor Neumann wrote to me from Vienna as follows:

‘Ihr Schreiben aus Lugano habe ich erhalten und beeile mich dasselbe dahin zu beantworten, dass die Information, dass meine Em-

pfehlung an die beiden von Ihnen genannten Herren schon aus dem Grunde nicht stichhältig ist, weil man mir selbst weder den Aufenthalt noch die Ausübung der Praxis in London gestattet hat. Obwohl ich den früheren König von England und jetzigen Herzog von Windsor, wie Sie wissen, wiederholt in Wien behandelt habe, und obwohl fast alle Potentaten meine Hilfe in Anspruch nahmen, wenn sie mich brauchten, wurde mir mit grosser Gnade nur eine Einreisebewilligung nach England, nicht aber das Recht der Niederlassung in Aussicht gestellt. Ich habe Sie längst in England vermutet, doch ist dies, wie ich jetzt sehe, leider nicht wahr. Ich wünsche Ihnen vom ganzen Herzen, dass Sie bald an jenem Hafen anlegen, den Sie sich wünschen und wirklich verdienen. Was meine Person betrifft, bin ich gerne bereit Ihnen dabei behilflich zu sein. Es wäre in Ihrem Interesse, wenn Sie mir ausführlich mitteilen, warum Sie England Amerika vorziehen, da, soweit ich informiert bin, die sofortige Ausübung der Praxis in England ausgeschlossen zu sein scheint, während in Amerika, nach Ablegung einer relativ einfachen Prüfung, die schon nach 3 oder 4 Monaten fast jeder hinter sich hat, die Praxis sofort aufgenommen werden kann. . . . Was meine Person betrifft, so kann ich nur meine Bereitwilligkeit, Ihnen behilflich zu sein, wiederholen. Es grüsst Sie bestens,

Ihr H. Neumann.<sup>1</sup>

This can be called a historic document. Is it not incredible that a man with such a reputation should have been refused the per-

<sup>1</sup> I have received your letter from Lugano and hasten to inform you that the information regarding the two gentlemen mentioned by you is inaccurate, for the reason that I myself have not been granted the right either to sojourn or to practise in London. Although, as you know, in Vienna I repeatedly attended the former King of England, the present Duke of Windsor, and although nearly all monarchs availed themselves of my assistance when they were in need of it, I myself was merely graciously accorded the permission to enter England, but not the right to practise there. I surmised that you have long been in England, but as I now see, this is unfortunately not the case. I hope with all my heart that you may speedily reach the haven of your desire, which you certainly merit. Personally I should be only too glad to help you in this. It would be to your interest if you would tell me at length why you prefer England to America as, according to information which I have received, there is no prospect of immediately obtaining the right to practise in England, whereas in America all that is required is to pass a comparatively simple examination, which almost anyone can do within 3 or 4 months, in order to be able to resume one's practice without delay. As regards myself, I can only repeat that I am ready to help you in any way. With sincere greetings,

Yours,

H. Neumann.

mission, not only to establish a practice but even to live in England? Is it not astounding that after it was learnt that he had been interned, a man of this prominence should not have been urgently requested to come to London, New York, Switzerland, or to any other free country, not only to enrich it with the benefit of his professional services, but also to render available to the medical schools his unique knowledge, surgical skill and vast experience,—a man whose lecture-room had always been crowded with students and specialists from every country of the globe,—a man, moreover, of the highest character and integrity? When Neumann finally reached New York he was a broken man. The attitude shown him by the members of his own profession made him so homesick that he even wanted to return to Vienna. But he died before he could do so.

At this point I should like to say a word about my own case. Hitler invaded Austria on March 11th, 1938, and as early as the 20th of that same month I received the following letter from Professor Darier, the leading dermatologist of Europe.

6, Rue du Louvre, Paris, 1<sup>er</sup>.

My dear Friend,

March 20, 1938.

I have thought that it might be of advantage to you if you could again, before a good-sized audience, deliver your lecture on *Psoriasis*, which you read about two years ago before the Society of Dermatology, and which did not have all the reactions and results which it merited.

If possible, will you come to Paris or half-way there, in order to discuss with our President or Secretary General as to how and when this suggestion might be put into execution.

Believe me, etc.,

Dr. J. Darier.

This letter represents an attempt on the part of Darier and his successor Tzanck to afford me an opportunity of leaving Austria.

Unfortunately, owing to the Nazi-imposed restrictions, I was unable to avail myself of this kind invitation. When I did escape from Austria the following letters were written on my behalf.

*Paul A. O'leary.*

Mayo Clinic  
Rochester.

English Home Office,  
London, England.

Sirs,

Dr. Erwin Pulay, formerly of Vienna, has informed me that he desires obtaining a licence to practise Dermatology in England, specially in London.



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English Home Office,  
London, England.

Sirs,

Dr. Erwin Pulay, formerly of Vienna, has informed me that he desires obtaining a licence to practise Dermatology in England, specially in London.

Dr. Pulay is known to me as one of the outstanding dermatologists of the continent, and his recent investigative research on the cause and treatment of Psoriasis, a most troublesome skin disease, is one of the valuable contributions of the last few years. My acquaintance with Dr. Pulay is not an intimate one, although his reputation as an outstanding dermatologist is international. I highly recommend Dr. Pulay for your thoughtful consideration.

Very truly yours,  
(signed) Paul A. O'leary.

*Prof. Michelson.*

University Clinic for Skin Diseases,  
Minneapolis.

British Home Office,  
London, England.

August 1, 1938.

Gentlemen,

It gives me great pleasure to write concerning Dr. Pulay, whose work I have followed very closely while he was in Vienna. His researches have been of the truly investigative type, and he has contributed largely to dermatology. Especially has he made advances in the treatment of Psoriasis and in metabolic disorders affecting the skin.

In my humble opinion, the British Home Office would be making a very wise choice if they gave this worthy man an opportunity to continue his work in England.

Very respectfully yours,  
(signed) Michelson.

But despite all the offers of help I received, including those by some of the most prominent representatives of British Medicine, I was not included among the fifty Austrian doctors who were selected to qualify for the British medical degree. I was permitted neither to study nor to set up a practice in this country! . . .

In order to make the above point quite clear let me offer an illustration. Would a Toscanini or a Bruno Walter be asked to submit to examination by the Royal Academy of Music before being allowed to conduct at Covent Garden? (Should such be the case it would not be surprising to learn that they had failed to pass; for their interpretation would doubtless differ greatly from that of most of the academicians.)

Whether it was Toscanini, Bruno Walter or the late Felix Weingartner,—whenever they came to this country they always used the same orchestras, the same scores, and the members of the orchestra used the same instruments as at other times. But what a difference in the performance! Those masters lent the stamp of their personality to the rendering of the famous classical works,

and the superlative musicianship of their performances is beyond question. But I use this illustration in order to point out that pathological symptoms are merely symbols comparable to the notes in a score, and that everything depends upon the reading, upon the interpretation of these symbols. That is why a great clinician called in to pronounce upon some difficult case may come to quite different conclusions from those generally held regarding diagnosis and treatment; for a diagnosis depends upon the accurate reading of all the symbols expressed as pathological symptoms. Now, suppose that such a clinician at his examination were to reach a different conclusion from that held by the examiner, the result would be that he would fail to pass his examination. In other words, his very excellence, representing just the difference between his opinion and that of others, would be the cause of his failure to pass!

To sum up, therefore, let me ask:

What is Medicine? Is it a profession or is it an art? Is Medicine to be regarded in the same light as a commercial undertaking, or is it not rather in the nature of a mission or, in the words of Sir William Osler, a calling? Is Medicine restricted in its field of operation to a definite frontier? Does a doctor change his knowledge, his skill, his personal experience in accordance with the country of his residence? Does the physician who changes his place of residence forfeit his duty to render his medical skill and service if he thinks he can be of help and if he is asked for it? Do the tubercle bacilli or any other germs differ in the principles of their pathogenic action on the Continent, in Great Britain or in America? Is the nature of diabetes determined by the passport of the patient or is the treatment of diabetes influenced by the passport of the doctor? Does a physician depend upon the sanction of any kind of medical association for the right to give his patients the benefit of his knowledge and of his personal experience? Does not a patient consult a special physician in order to obtain that particular physician's opinion? Is a patient not permitted to consult any specialist in the world upon whose experience and reputation he relies? And may such a specialist refuse to give his advice for the only reason that this patient came without having previously asked permission to do so from the representative medical body of his own country? Moreover, should a specialist before giving his opinion ask any medical society whether or not his opinion is in accordance with their own? Lastly I must ask, should a world-renowned specialist, who but yesterday was honoured by being appointed President of an international medical congress,

be compelled to-morrow to become a mere medical student? Has he forfeited his capacity and his internationally established reputation merely because he was forced to leave his country for political reasons? Does his medical reputation depend upon his possessing a British or American or any other degree of Medicine, rather than that of his own country, universally held in esteem? Must a doctor of international repute suddenly refuse to give his advice simply because he no longer lives in Vienna, Prague or Berlin, but in New York, London, or elsewhere, where many of his patients could be attended to, without being compelled to leave their own country? Are the discoveries in Science and Medicine, such as insulin, penicillin or the malaria treatment restricted in their application to the land of their discovery, or are they not rather a gift to the whole of mankind?

But if, on the other hand, these discoveries are to be regarded as international and for use all over the world, then it is obvious that the discoverers also should not be confined to a frontier. Nay, indeed, 'there is something rotten in the state of Denmark'!

These are crucial problems. They must be kept prominently in the foreground in all coming deliberations. Either this war is a decisive fight for ideals or it is not. Either we are fighting for a commonwealth of free peoples or we may as well once for all stop talking about it. All the plans at reconstruction will again end in failure if we do not face all these facts and fundamentally change our whole attitude toward this problem. For Medicine, Science and the Arts are super-national and must therefore be handled super-nationally.

I therefore most earnestly plead for the establishment of an International Supreme Court of Medicine.

## XIX

### PLEA FOR AN INTERNATIONAL MEDICAL COUNCIL AS A SUPREME COURT OF MEDICINE

**N**ow let me draw the final conclusions from all the preceding reflections and statements.

I have endeavoured to show why it is important that physicians and scientists be included in all councils dealing with post-war reconstruction. I have tried to indicate the enormous development achieved in Science and Medicine during the past

three decades, and have emphasised that Science has been shown to be indispensable for victory in this war. At the same time I have stressed the fact that the scientists and physicians of Germany are guilty of and fully responsible for the atrocities committed by that country.

I now urge the establishment of an International Health Council and Supreme Court, for the benefit of all the nations of the world,—a court which shall serve as an international forum for the purpose of exercising supervision and control over all the governments in their dealings with human affairs.

I suggest that the control of Medicine and Hygiene be organised along the following lines, in connection with post-war planning.

*A. Medical and Scientific Attachés at Embassies.* After the war is over every Government will again be represented by ambassadors in the various countries. As under existing conditions each embassy possesses a military, naval, press attaché, etc., so there should in future also be assigned to each embassy a medical and a scientific attaché. The task of the medical attaché shall be (a) to inform his government of all new advances in Medicine, and (b) to carefully watch whether the ethical principles of Medicine are being adhered to in the country to which he is delegated, and failing this, to report to the Minister of Health of his own country. Similarly, the scientific attaché shall report any cases of the misapplication of new scientific discoveries to destructive purposes!!

By this means it will no longer be possible for any country to be backward in the matter of medical education and treatment, for in this way all new additions to medical knowledge will automatically become accessible to all nations. The same procedure should apply to recent discoveries in other fields of science, for which the scientific attaché should be responsible.

*B. National Ministries of Health and Council of Health.* It shall be the duty of the medical attachés to report all matters of information pertaining to their department to the Ministry of Health of their respective countries, who in turn shall communicate this information to the National Council of Health. The Minister of Health of every government shall select a National Council of Health, consisting of two specialists in every field of Medicine, whose appointments shall be for three years.

The National Council of Health shall nominate a delegate to the International Health Council.

*C. International Council of Medicine as Supreme Court of International Medicine.* The Supreme Court of International Medicine and Hygiene shall meet every year. It shall consist of three general

delegates from each country, the medical and scientific attachés to the various governments, and the National Minister of Health of each government.

Its functions shall be (a) to discuss all the latest developments in Medicine; (b) to consider the various suggestions submitted by the delegates of the National Council of Health.

Every decision of this Supreme Court is to be regarded as a decision of last appeal.

Any government offending against the principles of humanity or supporting inventions aiming at destruction or the preparation for war shall be judged by this International Court, which is to be regarded as the highest international medical court.

In addition, every physician shall have the right to appeal to this Supreme Court if he is of the opinion that any of his discoveries are being ignored or suppressed. For the proper organisation of Medicine it is highly essential that all medical 'cliques' be abolished.

Finally, the Supreme Court shall be responsible for the control of international moral hygiene, and any government offending in this respect or against the principles of humanity shall be judged by the International Council. Thus the world will automatically be safeguarded against a repetition of the conditions which prevailed in the medical world controlled by National Socialism, which can only be considered as a prostitution of the noble profession of Medicine.

## XX

### GERMANY

'It is a horror beyond what imagination can grasp.'

(The late Archbishop of Canterbury, William Temple.)

**I**N attempting to make some suggestions as to how best to deal with Germany I drew attention to the multiplicity of problems with which we are confronted in connection with post-war planning. The main question is: How are we to treat Germany, how deal with this people which is once again responsible for a world-wide catastrophe, this people which has manifested a degree of brutality which it is well-nigh impossible for human nature to

grasp or believe. This problem is one of vital importance, and its solution will be a task of great difficulty. Let us therefore this time really endeavour to comprehend the mentality of the Germans, so that from this comprehension we can draw appropriate conclusions and plan procedures which may for all time prevent a recurrence of such a war. It may be useful, perhaps, to speculate on some of the principles of a code which should help the Allies to deal with a situation which is without precedence.

My purpose in discussing the problems of adaptation, the collective soul and the manner in which mass susceptibility must be influenced, was in order to facilitate a better understanding of all these matters. In other words, I have endeavoured to make practical application of all our acquired knowledge so that we may be better equipped to deal with this German problem.

The first question to be asked is: Why have the Germans always shown enthusiasm for warfare, and why, despite their unvarying aggressiveness, have they always insisted that they themselves were the victims of aggression? Is this a mere coincidence, or is this whole attitude not rather a definite feature of the German mentality?

Is there any basis for their trend of thought and their specific attitude towards mankind? Why this claim to be a 'master race'? Why this cry for more *Lebensraum*?

In reply to my first question it can be said that the lust for war, for aggression, for conquest must be understood as a deeply rooted characteristic of the German mentality. It can be traced back to the *Nibelungen Saga*. We have to understand that every saga reflects the subconscious of a people. Throughout this epic the Germans display themselves primarily as worshippers of power and admirers of a false concept of heroism, and this it is that underlies the German cult of warfare, associated with a distorted form of nationalism. In the *Nibelungen Saga* we find Siegfried in his physical strength symbolising the sovereignty of the race; here we see attempts at world conquest (*Welteroberung*) by treachery and by the breaking of solemn agreements. The idea of the 'Tarnhelm' as an expedient of disguise (*Tarnung*) is accomplished by means of the magic helmet (thus furnishing us with a primitive example of the Fifth Column). Nevertheless, despite his brutality and treachery, Siegfried has continued to live on among the German people as a heroic legendary figure, and the elements of savagery revealed in this epic must, therefore, be considered as inherent in the German nature. The whole saga is an idealisation of their ideal of conquest, of domination and of world supremacy.



But as I have pointed out in the chapter on Religion, in order to conquer our bestial instincts they must be sublimated. Religion has the supreme task to sublimate our instincts. Therefore, the ultimate character that a people acquires will depend upon the form and ideals of its religion. If then we realise what kind of religion is represented by the German cult of Wotan, it can at once be seen that its aim and ideals are diametrically opposed to everything for which Christianity stands. For the Wotan cult was one of the crudest forms of paganism of the primitive world which, with its sister cults, was only vanquished and superseded by the Christian religion, by the Christianity which is 'the anticipation of the essence of all religion.'

The latent disposition to cruelty, in association with a marked inferiority complex, led to a state of over-compensation and to the adoption of certain philosophical concepts which served as the basis of education. It is the specifically Prussian philosophers, represented by Fichte and Hegel, who chiefly contributed to this fortified attitude of world aggression. And it is not to be wondered at that such doctrines and convictions should prevail, even among the intellectuals, when a philosopher like Fichte taught that 'no law and no right exists between states except the right of might, of the stronger', or when Hegel emphasised that 'war is eternal and moral'.

These two quotations will serve for the moment to indicate the lines along which the minds of the Germans were trained, for it must be realised that these philosophers became the spiritual guides of the German people at a very critical time in the upbuilding of their nation.

Whilst, therefore, the Fichtes and Hegels and Treitschkes were hailed by the Prussian junkers as the representative philosophers of Germany, Goethe and Schopenhauer were never admired or regarded as their supreme representatives, a fact that is easily explained by the two following quotations. Schopenhauer was of the opinion that 'alles Unglück in der Welt kommt vom Nicht zu Hause Bleiben',<sup>1</sup> while Goethe wrote:

'Frage nicht durch welche Pforte  
Du in Gottes Stadt gekommen,  
Sondern bleib am stillen Orte  
Wo Du einmal Platz genommen.'<sup>2</sup>

<sup>1</sup> All the unhappiness of the world comes from not staying at home.

<sup>2</sup> Do not ask through which portal you arrived at the City of God, but remain in the quiet spot where you have taken your abode.

These two quotations reveal the very reverse of aggression and of a desire for world conquest. Neither Schopenhauer nor Goethe was blind to the faults of the Prussians, whom they not only despised but very often violently criticised. It is therefore not surprising that both these great men should have been severely underrated during the Nazi régime. I might also remark that the philosopher Nietzsche, for whom, by the way, I have no personal admiration, similarly showed his penetrating understanding of the Germans, of whom he said: 'The Germans are a dangerous people. They understand the art of intoxication.' However, it is just Nietzsche, with his superman ideology, who must be regarded as a representative of this peculiar German mentality against which we are fighting—a mentality which is mainly responsible for the present catastrophe in which Germany herself is foundering. It is not surprising that Nietzsche became the venerated philosopher of Hitler and his adherents. Let me quote the words of Richard Wagner: 'Whenever the Germans got the upper hand in another country, they were hated as oppressors.'

Let us turn to the second question: Is there any basis for their trend of thought? I entirely agree with the opinion expressed by the neurologist, Professor Birkner, of Colombia University, New York, in his book *Is Germany Curable?*, in which he defines the German mental state as one of paranoia. But Birkner's statement does not suffice for our purpose, for we are concerned to discover the underlying cause of this condition.

In my opinion this paranoia can be traced back to an inherent sense of inferiority which has led subconsciously to an inferiority complex.

It was with the object of explaining the characteristics of such a condition that in previous chapters I have discussed at some length the contributions of Freud and Adler, as well as the problems connected with the individual in his environment. For it is only by means of a thorough knowledge of modern biopsychology that we shall be enabled to grasp all these most complicated matters and to deal successfully with the German mentality.

Over-compensation of an inferiority sense may lead to the various manifestations of paranoia and megalophobia, as a result of which the whole personality becomes hypertrophied. Such a psychic state is revealed in an attitude of extreme arrogance, of self-exaltation, and in a tendency to hide the actual low ethical standards of conduct under a veneer of superior ones. The Germans wish to be the *Herrenvolk*, or master race, but their underlying sense of insecurity is betrayed by their attitude of being

## DESTINY OF TO-MORROW

continually on the defensive, while the violent aggressiveness displayed represents over-compensation of an actual weakness. With these characteristics is associated the Germans' hyper-sensitiveness to the opinions of others, and this sense of inferiority is also manifested in an exaggerated sensitiveness regarding pride and honour. But inasmuch as this weakness is also a sign of over-compensation, it offers a vulnerable point of attack and a powerful means of influencing the German inferiority complex.

Nevertheless, we must not overlook the fact that aggressiveness is one of the most fundamental instincts of all living beings and represents a defence mechanism in the struggle for existence.

The latent aggressiveness of the German people has been powerfully reinforced by the Nazi doctrines, and even the youngest children have been taught that force is the only method of operation in life. Therefore, if we wish to counteract these evil doctrines we must descend to the level of the Germans themselves, realising that they understand one language only, that of power and force. They respect only blind obedience, and not only do they ignore any appeal to their human instincts, but they would also despise their own subjugators were they to use humane methods of treatment rather than those dictated by overbearing arrogance.

The German lust for power can only be vanquished by complete and permanent disarmament. The German government must therefore be supervised by an international police force, equipped with adequate power of enforcement, such as is now possessed by the United Nations. The German people must be made to realise every day and every hour that they are definitely defeated and under the control of powerful forces which are not their own. This is a *sine qua non* for all future constructive up-building. Let us therefore avoid repeating the fatal mistake of being sympathetic and compromising in our attitude towards them and thus fail to secure their wholesome fear and respect. The Germans have no claim to leniency on any grounds whatsoever. I fully support every writer who has given forcible utterance to this opinion. But the most important thing will be to show the Germans that they have forfeited the right to be regarded as a people possessing an ethical standard. Hence the adults should be rigorously excluded from the society of other nations whom they might contaminate. In insisting on this German isolation let us recall two facts: first, that not only members of the Nazi party, but thousands of university students, as well as many professors, passively witnessed and even supported the shameful public burn-

ing of books; nay, they even cheered joyfully around the bonfires.

Let us, moreover, not forget that during the first World War ninety-three of the foremost German intellectuals signed and published a manifesto declaring that the violation of Belgium's neutrality was moral and just. To-day the scientists and intellectuals have again supported Hitler's régime with all its crimes. Thus I feel impelled to say that all these intellectuals must be blamed, all the collaborating artists must be considered as incriminated in the Nazi guilt.

Therefore the United Nations must occupy Germany for several years, because not until all the Germans definitely realise that they are being ruled by a foreign power will they finally learn their lesson.

Let us face the fact that the German nation, as we have tried to point out, is suffering from a peculiar mental condition, whether this be named paranoia or be given some other designation. But certain it is that an entire nation, if diseased, cannot be cured, for it is impossible to alter the basic nature of human beings. Therefore we must try, to the best of our power, to re-educate the Germans; but, bearing in mind that their mentality is essentially pathologic, they must be handled in the same way in which we are accustomed to dealing with paranoic patients who are kept in a mental hospital. They must be carefully watched and any symptoms of a paranoic tendency must be at once combated. We cannot take any more chances by believing again that we shall be able to alter the mentality of such a powerful nation or radically to alter their trends of thought. But what we can do is to protect their neighbours and thereby the rest of mankind from any future attempt on the part of the Germans to dominate the world. If we clearly envisage this aspect of the problem, we may harbour some hope for the future of mankind.

Let us clearly face the facts by applying our biological knowledge to a solution of this most difficult problem of how to deal with Germany. It may not be amiss at this point to refer again to Richard Wagner, who was not only one of the most outstanding representatives of German culture, but should properly be considered as a great apostle of Germanism.

It is very striking that in his *Siegfried* Wagner says: 'Alles ist nach seiner Art, an ihr kannst Du nichts ändern. Helden nur können mir frommen.' In this we see the main features of the German mentality, the cult of the heroic and the assumption that we are as we are and that nothing can alter us. It is true that modern psychology has taught us that each individual is as he is

and we must recognise this truth. But at the same time we must realise that even though human beings cannot be changed by will-power or by a sudden reformation, biology has shown us how greatly human nature can be adapted. Changeability is one of the most important attributes in human evolution. We have learnt the part which environment plays in adaptation and through it in accommodation and incorporation. If we wish to bring about a fundamental change in the German nature it can only be effected through environmental influences. This opens up a shining vista of constructive possibilities. To give but one instance, German children of an impressionable age should spend a considerable length of time abroad where they could imbibe sane ideas and correct principles of conduct.

We must distinguish between the immediate work of dealing with Germany at the end of the war and the subsequent task of reconstruction. It is obvious that in all the occupied countries there will be a great outcry for revenge. All the cruelties and atrocities which have been perpetrated have, quite naturally, accumulated a tremendous hatred against the German people. This feeling will inevitably break out and such a state cannot be avoided; indeed, it should not be avoided. Biologically considered, revenge must be regarded as a biological reaction of flesh and blood, as an emotion which cannot be kept on ice pending the setting up of the various tribunals and the decisions which they may reach. Emotion of this kind must find an outlet or, psychologically expressed, must *abreagieren*. Nature should never be neglected or underestimated, for human beings are governed by natural laws. The punishment which will take place will clear the atmosphere, will diminish the tension and will prepare the way for all the various methods of reconstruction.

It is impossible to overrate the fundamental difference existing between the people of the occupied countries who have themselves experienced all the horrors of the German cruelties and those who have never been exposed to these horrors. Neither the British nor the Americans are in a position to judge impartially in this matter, for the simple reason that they have not experienced invasion, occupation and all the Nazi barbarities. It is a very different matter to be providentially isolated on the other side of the ocean. But even to-day, unfortunately, there are but too many of them who believe that most of the atrocity stories they hear 'cannot possibly be true', and are based on exaggeration and propaganda. But those who are best entitled to know rightly point out that one of the greatest dangers to a fair and just

post-war settlement lies in the Anglo-Saxon's shortness of memory, associated with his innate habit of shaking hands with a defeated foe (unmindful of the fact that all opponents do not 'play the game').

Therefore the occupied countries must have the deciding say in the matter of punishment, and this question cannot be settled by any written decrees, dictated from without.

But the main task will be the problem of reconstruction. In dealing with this aspect it is well to refer again to the mechanism of over-compensation resulting from an inferiority complex. I have tried to show to what extent this complex has been responsible for the aggressive qualities of the Germans, and have endeavoured to trace back to this source the numerous negative qualities which culminated in all their acts of savagery and violence. But let us not forget that this same over-compensation, when properly sublimated, has been equally responsible for the many positive attributes manifested in the magnificent accomplishments which the German people have contributed to world culture and civilisation. We must bear in mind the Germans' industry, their tenacity, their ambition, their great skill, and above all their thoroughness and profundity. All these are manifestations of over-compensation by sublimation.

It is therefore highly essential that we do not lose our sense of proportion. Let us not forget that there has existed a Germany to whom mankind will for ever be indebted. Her noblest representatives are still with us—Bach, Beethoven, Brahms, Lessing, Goethe, Heine, and many others. Let us, moreover, not forget their triumphs in Science and all their many contributions to Medicine. Above all, let us remember that there are still many great Germans among the living who have never bowed the knee to Nazism. I need only mention such names as Cardinal Faulhaber, Thomas Mann, Albert Bassermann. I make this statement with emphasis because these are the people with whom we must collaborate in the work of reconstruction. I applaud the suggestion made by Emil Ludwig that the date of the great German national holiday should be set on the birthday of Goethe—I personally would suggest that of Beethoven, as the supreme representative of mankind. And this leads me to the most important problem of Re-education.

All efforts at reconstruction must centre around re-education and must take into account, first, the fact that the German people must be moulded anew, and secondly, the great success and value possessed by good propaganda. For this purpose universities,

schools, theatres, the radio, films, newspapers, and all other methods of publicity must be strictly controlled.

As the universities were the focus for the propaganda of Nazi ideas, they must now be converted into centres of reconstructive thought and re-education. And in order that the universities may in future be used for humanitarian and super-nationalistic propaganda, it is essential that the mentality of the professors be detoxicated, which can only be effected by the establishment of an international university. It must be the aim of such a university to exercise supervision over all the universities and schools in Germany and to control all the text-books used in the various institutes of learning. To what better purpose could the building of the League of Nations at Geneva be dedicated, that unfortunate centre which so dismally failed to carry out the high hopes for which it was established?

In connection with the propaganda work of film and theatre, the crimes of the Nazis should be shown up again and again, so that they be not lost to memory. All the speeches of Hitler should be recorded and compared with the actual facts, and as a striking counterpart there should also be reproduced the speeches of Churchill and Roosevelt. Let us not forget how quickly mankind forgets.

Bismarck, who in Germany stands as a symbol of his country's greatness, would make an excellent subject for a propaganda film, both because of his historic position and his unique exemplification of the German will for power. (Power complex.) But to be really instructive this film should present a clear psychological portrayal of the underlying forces which determined his personality. The important part played by the instincts in moulding a character should be shown, for the incongruities in Bismarck's character only become intelligible if they are regarded as a sublimation through over-compensation. A typical German statesman and the personification of the Prussian *Junker*, he appeared in his capacity as Ambassador as a most charming and refined figure in cosmopolitan society, and all these contrasting qualities gave him the stamp which made him the centre of interest in the contemporary world. But I must emphasise again that it was this over-compensation, due to inferiority, which explains many of his attitudes and motives, for the man was inherently lacking in self-assurance. It may be worth while to quote in this connection the remarks made by the British painter Richmond, on the subject of Bismarck, with whom he was personally acquainted. He said: 'Bismarck is a man of kindly disposition, finely strung, fascinating

in the extreme, and a thorough gentleman. I once asked him whether he was really the "Iron Bismarck". "No," he replied, "I have only trained myself to be hard. I am all nerves,—in fact, so much so that my main job in life is to keep them under control."

These words clearly reveal that Bismarck was fully aware of his complex nature. He can only be understood if one realises the instability of his disposition which he continually strove to sublimate through over-compensation. But the anomalies in his personality only become intelligible if we comprehend his hyper-sensitive nature and its reactions. It is this hyper-sensitiveness that produced Bismarck's strength, as well as his gentle traits.

So it is only by viewing him from a psychological angle that it becomes possible to understand the personality of Bismarck in all its complexity. But his own culture was deeply rooted in religion and tradition. The importance of religion and tradition cannot be sufficiently emphasised in the building up or the breaking down of a great personality, regardless of talents and gifts. Therefore the anomalies of such a character as Bismarck's should be thoroughly worked out in a film as suggested, in order to demonstrate how far over-compensation is instrumental in the shaping of a person's character and spiritual attitude.

Films of the type of 'Ehrlich', 'Pasteur' and 'Madame Curie' cannot be shown too often, as they serve a valuable educational purpose; but we must not omit also to show such films as 'Professor Memluck' and other equally strong exposures of Nazi practices.

In my opinion the best way of constructively influencing the German mind would be, first, to emphasise their merits and accomplishments by extolling their great contributions to civilisation, and then to compare their positive attainments with the fatal consequences of National Socialism, thereby clearly revealing the disasters which this régime has brought to Germany and all who have collaborated with her.

We cannot annihilate a people. We cannot perpetuate an attitude of hostility and hatred over a period of decades. We must think constructively and thereby forge an anchor which may serve to stabilise the shipwrecked vessel of Germanism. We must give the Germans the chance to develop their best instincts, for, as we have said, no human being is exclusively good or bad. Nevertheless, we must not fail to emphasise that the downfall of the nation was accomplished by the deliberate development of their worst instincts, while at the same time their godlike impulses



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were not only suppressed, but entirely annihilated by Nazism.

While religion will always be the strongest means of fostering and reinforcing a nation's valuable social instincts, the greatest representatives of German thought, whether in science or art, should also serve as models.

I am sure there are people who doubt the possibility of altering the German mentality. But one valuable co-operative factor in this task should never be overlooked, namely, the deep-lying motives of ambition and a desire to excel.

In this connection many useful lessons can be learnt from the Nazi devices which so skilfully utilised to destructive ends every known method of psychological approach. One such highly effective method was to confer power, in the form of a mission, upon unimportant and obscure persons who had always lived under suppression and without any scope for activity. In many cases some insignificant teacher from a provincial village, who had had no contact with the main centres of the country, was suddenly entrusted with a secret mission, that of becoming a *Gauleiter*, a so-called representative of culture. The Nazis took clearly into account the effect this would have on the psychology of such an individual: the feeling of importance at being entrusted with a secret mission, not to mention the very influential factor represented by the accompanying pecuniary remuneration.

To show how a man who was thoroughly honest could be converted into a successful Nazi agent, I will cite the following instance. For many years there was in the employ of the Viennese Institute for Pathology and Anatomy a laboratory orderly, a man whom I personally treated for skin disease. After having lost sight of him for a considerable time after he left the hospital, I unexpectedly met him one day in Baden, a spa near Vienna. Surprised at finding him there, I asked him what he was doing in Baden. Thereupon he frankly replied: 'I must tell you that I lost my employment as the result of my skin disease and you will be surprised to learn that I am now an ardent Nazi agent.' Noticing that I was shocked at his words, he added: 'You must understand me. I am paid ten shillings a day, and all I have to do is to go out into the street with a crowd twice a week and shout "*Heil Hitler*".' This was in 1935, three years before the Nazi invasion of Austria.

Let us face the facts. At bottom Germany is just as indispensable for the survival and resurrection of Europe as is France, and there can be no question of annihilating the nation. We must set as our goal to arouse once more the true basic feelings and emo-

tions of the German people and to reawaken and elevate their souls. In the words of Felix Weingartner: 'In jedem Herzen schlummert Gott und harret derer die ihn wecken.'<sup>1</sup> Let it therefore be our task to reawaken the God within the German people.

How can we best fulfil this task? By calling upon religion as the only means of sublimating the bestial instincts and of awakening the divine element in man.

To summarise, let us emphasise again and again, by every means of propaganda at our disposal, that far from being vindictive, it is the aim of the victorious Allies to reawaken a German nation worthy of being finally included in the community of nations. But before they are ready for this they must undergo a fundamental purge and change. This change must be carried out by re-education, in order that the German people may finally learn to respect the value and qualities of other nations and to realise that they are neither a master race nor yet an inferior race.

In discussing the Collective Soul I stressed the various factors which exert a decisive influence upon the social organism. It is these factors that must be used to influence it in a reconstructive way. Le Bon states that 'simple *Assertion* devoid of all foundation and proof is the first method of instilling an idea into the collective mind. The more definite this assertion and the less encumbered with proofs and verifications, the more it is respected.' Le Bon refers to the religious writings and codes of law which at all times have adopted the method of simple statement. 'The same applies to the procedures of statesmen and is characteristic of all dictatorial methods.'

A second and probably more important method cited by Le Bon is *Repetition*. He says, 'that which is repeated takes firm root in the deep regions of the subconscious where the motives of our actions are prepared. After some time, when we have already forgotten who was the originator of these repeated assertions, we finally come to believe them ourselves. For it is on this mechanism of repetition that are based the principles of advertising.' No less a man than Napoleon said, 'there exists but one figure of speech—*Repetition*. What has been repeated becomes so firmly fixed in people's mind that it is finally accepted as proven truth.'

And this brings us to the significant fact that all manifestations of hyper-sensitivity, of allergy, are also exclusively based on the mechanism of repetition. Let us therefore render the Germans allergic to all their old modes of thought, to all their crimes, to their whole mental outlook.

<sup>1</sup> God slumbers in every heart and awaits him who shall awaken him.

If we realise that the propaganda of the Nazis was based upon this law of repetition, our way of operation will be clear to us. For the propaganda which the Nazis used was based upon a profound understanding of the mass mind, and we must, therefore, use the same channels, although for the attainment of positive ends.

Only ethical standards count in the world, and if the Germans wish to become members of human society they must attain those for which the Allies are fighting, and acquire a true and profound understanding of the nature of justice and freedom. In the words of Jan Masaryk: 'I am keeping a spark of hope that when Germany will have no Frederick the Great, no Bismarck, no William II and no Hitler, she will come out of her "amok" period and realise that Mozart, Beethoven, Heine, Kant, Einstein and Thomas Mann were, and are, also Germans. If this change becomes permanent then the peace of Europe will be guaranteed for ever.'

For Justice and Freedom possess an international value; they can and must never be the privilege of one single race. I think I cannot find a more appropriate and symbolic conclusion than by recalling the words of 'Richard III':

O coward conscience, how dost thou afflict me!  
The lights burn blue. It is now dead midnight.  
Cold, fearful drops stand on my trembling flesh.  
What! do I fear myself? there's none else by:  
Richard loves Richard: that is, I am I.  
Is there a murderer here? No. Yes, I am:  
Then fly! what! from myself? Great reason why.  
Lest I revenge. What! myself upon myself?  
Alack! I love myself! Wherefore? for any good  
That I myself have done unto myself?  
O! no! alas! I rather hate myself  
For hateful deeds committed by myself.  
I am a villain. Yet I lie; I am not.  
Fool, of thyself speak well: fool, do not flatter.  
My conscience hath a thousand several tongues,  
And every tongue brings in a several tale,  
And every tale condemns me for a villain.  
Perjury, perjury, in the high'st degree;  
Murder, stern murder, in the dir'st degree;  
All several sins, all us'd in each degree,  
Throng to the bar, crying all, 'Guilty, guilty'.  
I shall despair. There is no creature loves me;  
And if I die, no soul will pity me.

Nay, wherefore should they, since that I myself  
 Find in myself no pity to myself?  
 Methought the souls of all that I had murder'd  
 Came to my tent; and every one did threat  
 To-morrow's vengeance on the head of Richard.

## XXI

## ENGLAND

'Geht Ihr nach England, diese Zeilen,  
 O nămet ihn den Schreiber mit,  
 Dort wo sie schreiten, wenn wir eilen,  
 Doch eine Spur lässt jeder Schritt.' <sup>1</sup>  
 (Grillparzer.) <sup>2</sup>

**I**N accordance with my previously given explanation of the law of ambivalence and polarity, it must be assumed that if we accept the fact that a nation can be governed by an inferiority complex within its subconscious, the possibility of the existence of the reverse condition, that is, a nation characterised by a superiority complex, must also be accepted. In such a case, over-compensation of a superiority complex would manifest itself by the exactly opposite traits to those presented by an over-compensated inferiority complex.

Let us endeavour to prove the validity of this assumption, but in doing so let us emphasise that such an analysis should not be regarded or misinterpreted as criticism. I merely wish to reserve the right to use the same modern psychological methods for the interpretation of this opposite type of mentality, even though they be applied to England.

What is apt at first sight to strike a person unacquainted with the English is an external bearing so apparently unassuming and even indolent as might tend to arouse the contempt of anyone ignorant of their underlying strength of character, a quality which, however, does not fail to reveal itself upon a closer ac-

<sup>1</sup> If e'er these lines reach England's shore,  
 Then let the writer with them disembark,  
 Where with unhurried tread they walk  
 When we but rush,  
 Yet each step leaves its mark.

<sup>2</sup> Grillparzer was the greatest representative of the poetry of Austria.

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 Find in myself no pity to myself?  
 Methought the souls of all that I had murder'd  
 Came to my tent; and every one did threat  
 To-morrow's vengeance on the head of Richard.

## XXI

## ENGLAND

'Geht Ihr nach England, diese Zeilen,  
 O nămet ihn den Schreiber mit,  
 Dort wo sie schreiten, wenn wir eilen,  
 Doch eine Spur lässt jeder Schritt.' <sup>1</sup>  
 (Grillparzer.) <sup>2</sup>

**I**N accordance with my previously given explanation of the law of ambivalence and polarity, it must be assumed that if we accept the fact that a nation can be governed by an inferiority complex within its subconscious, the possibility of the existence of the reverse condition, that is, a nation characterised by a superiority complex, must also be accepted. In such a case, over-compensation of a superiority complex would manifest itself by the exactly opposite traits to those presented by an over-compensated inferiority complex.

Let us endeavour to prove the validity of this assumption, but in doing so let us emphasise that such an analysis should not be regarded or misinterpreted as criticism. I merely wish to reserve the right to use the same modern psychological methods for the interpretation of this opposite type of mentality, even though they be applied to England.

What is apt at first sight to strike a person unacquainted with the English is an external bearing so apparently unassuming and even indolent as might tend to arouse the contempt of anyone ignorant of their underlying strength of character, a quality which, however, does not fail to reveal itself upon a closer ac-

<sup>1</sup> If e'er these lines reach England's shore,  
 Then let the writer with them disembark,  
 Where with unhurried tread they walk  
 When we but rush,  
 Yet each step leaves its mark.

<sup>2</sup> Grillparzer was the greatest representative of the poetry of Austria.



quaintance. But this attitude of 'modesty', which may often be taken as a pose, can be explained if we penetrate more deeply into the biopsychologic structure of this people. This attitude is merely the expression of an over-compensated sense of self-assurance, of feeling superior. For the outward assumption of superiority, so repugnant to the English, applies equally to things mental and material. This sense of superiority is of course sub-consciously fixed. Only through the mechanism of over-compensation does it become converted into the various attributes and habits which are determinants of the British make-up.

To reduce this state to a general formula: the English manifest themselves externally below their actual very high standard. This characteristic can also be interpreted as a form of *Tarnung*, or disguise. On the intellectual plane this has resulted in the establishment of a number of 'taboos' which, needless to say, constitute a perpetual source of astonishment to the continental mind.

For example, in mixed society in England it is considered 'bad form', not only to introduce subjects of conversation above the commonplace, but also to give evidence, however unwittingly, of possessing an intelligence above the mediocre. In this way they register their disapproval of all manner of display and vainglory and their adherence to the so greatly admired principle of understatement.

This preference for under-statement is a significant feature of an over-compensated superiority complex. As I have mentioned in another connection, language is always a very reliable index of psychological conditions. In everyday life, if one is asked, 'How are you?' the usual reply is, 'Not too bad', or 'It might be worse'. Correctly interpreted, this, of course, means 'Very well, thank you'. So we see that even if a situation is excellent it is expressed in the barest form.

Whilst the Germans readily place their great men on a pedestal, the English show a preference for levelling all things. They even hesitate to extol any kind of superior accomplishment. If we try to explain this attitude from a deeper psychological point of view, we should be prompted to say that they take for granted the qualities of greatness and indomitability in the British, but the operation of this mechanism of over-compensation is externally manifested as a constant tendency to minimise their national accomplishments, to disguise their tremendous abilities and vast knowledge, and even to conceal their emotions. In this is doubtless rooted their easy-going acceptance of things as they are, their aversion to looking ahead, and their disinclination to facing facts.

And this would seem to account for many of the contradictions which at first sight stagger the outsider.

At all events, there certainly exists a marked discrepancy between the inner assurance of being superior and its outward manifestations. Being convinced that they are the 'master race' they do not need to proclaim the fact from the house-tops. The English are static and not dynamic by nature; this explains their lack of ambition. For ambition, drive, industry are indications of a sublimated inferiority. But they are also the result of struggle, of the fight for existence; and the life of the English, thanks to the richness of the country and its geographical isolation, has been comparatively easy. There has not been the excessive competition which automatically spurs on to effort.

But the persistent emphasis on the national virtue of understatement (which during the war has become a veritable mania) is of course only a manifestation of an inverted form of a sense of superiority, which can easily even be taken for snobbery and as such is as boring and annoying as the opposite fault of intellectual assertion, which has at least the virtue of being sincere. Thus the national imperfections, enlisted as elements in the external machinery of under-statement to reinforce the time-honoured policy of 'muddling through', only serve additionally to emphasise the underlying British superiority which in the end will always prevail and 'win the last battle'. And so we see that this inadequacy and imperfection is an important factor in the picture of the British superiority complex in its over-compensated form.

A further consequence of such a mental condition is a certain spiritual inertia, or let me rather say, an inertia of the soul (*Trägheit der Seele*).

In the English this conviction of superiority represents such an essential part of their national make-up that the very word 'foreigner' has come to be considered as almost a term of opprobrium. Indeed, it is just this contempt for all foreigners and foreign tendencies that so forcibly strikes all persons from the Continent, who have never encountered this attitude in any other country, as one of the most extraordinary features of the British mentality,—a feature all the more enigmatical since this attitude is in entire contradiction to the manner in which the English actually behave towards the foreigner. In this respect we refugees can amply testify from our personal experiences to the whole-hearted generosity and hospitality of which we have been the recipients. And here we touch upon another fundamental English trait, namely, their vast humaneness and sympathy for the

afflicted. Why is it, then, that despite her anti-foreign attitude, England has at all times served as a harbour of refuge for the persecuted and stranded from all countries?

Indeed, so deep-rooted is this sense of humanity and the instinct of decent behaviour that it is directly responsible for many of the mistakes the English make in dealing with less humane nations. Owing to their inability to believe in many of the crimes and barbarities such as have occurred in recent times, they are too prone to overlook or minimise them in their sportsmanlike readiness to 'make up'.

I don't think that I am exaggerating when I say that the friends of England apprehend as one of the greatest menaces to a permanent peace settlement her traditional habit of forgetfulness and negligent tolerance toward her former enemies, but for which failing the international situation could never have reached the critical state which ultimately culminated in the present conflagration.

Moreover, let us not make the mistake of assuming that the English are incapable of cruelty or that they have completely sublimated all their bestial instincts. They can of course show the same degree of brutality as a German if encouraged in such a direction. I myself was witness on one occasion of such behaviour on the part of certain high-ranking British officers when a train full of Jewish refugees was leaving a London terminus. There was no difference between the speech and attitude of those English officers and any Nazi official! The refugees were treated in such a way as clearly to indicate that any persons are apt to react in a similar way if unchecked.

As I have stated in another connection, humanity is based upon tolerance acquired as the result of mastered intolerance. This country is a striking exemplification of this high degree of tolerance, and its special type of democracy, manifested in every phase of English life, comprises respect for the individual, freedom of thought, freedom of speech, and freedom to live as one pleases.

The English are certainly not a 'nation of shopkeepers', but a 'nation of gentlemen', a nation imbued with the highest respect for human dignity, for the individual as such.

Why, then, is it that there still prevails such a dislike for foreign influence? I think, if viewed from a biopsychological angle, that I can offer an explanation. Environment, landscape and climate are undoubtedly the chief factors upon which this characteristic is based. It is obvious that there must exist a great difference between a people living on an island, surrounded, isolated and pro-

tected by the sea, and one living on the Continent, without a definite boundary and thereby brought into close contact with other peoples,—a condition that definitely fosters interchange of thought and customs. A parallel condition to that found on an island prevails in valley communities which are shut in by high mountains; here also the people of the adjoining valleys are regarded as 'foreigners'. This condition is seen in Switzerland, where every canton constitutes a distinct community possessing an individuality of its own.

But there is yet another factor which, in my opinion, accounts for this anti-foreign attitude. I refer to the highly developed sense of tradition possessed by the English, who instinctively feel that an alien mind cannot properly understand and appreciate this deeply rooted tradition. In this we see an instinctive self-protective mechanism at work, manifested in the realisation that this tradition is dependent upon the environmental conditions and cannot therefore be transferred to any human being who has grown up in an entirely different environment. This deep link between the individual and the past on the one hand, and the individual and his environment on the other, doubtless represents an additional cause for this anti-foreign attitude.

This sense of superiority acts as a chronic sensitiser, leading to an allergic reaction. Or, biologically interpreted, the tissue of the English is rendered allergic, hyper-sensitive, and reacts vulnerably to everything foreign. The result is defence and rejection. Hence we can state that the English are allergic to everything foreign.

And this seems to offer the key to this most fascinating problem. We know to-day that the allergic reactions are based upon and rooted in biologic intolerance. Intolerance is a manifestation of the instinctive self, of our subconscious. The more the instinctive self and thereby the subconscious is rendered intolerant, the more tolerant will a person or a people appear if this intolerance becomes powerfully sublimated and reaches the domain of the conscious. There is definite evidence for the validity of this explanation, since from a clinical point of view the English show a very marked tendency to the various allergic diseases. In no other country is there such a high percentage of allergic conditions, such as hay fever, migraine, asthma, rheumatism and liver disorders. As I have pointed out, an allergic condition is never restricted in its manifestations to the physical plane exclusively, but also affects the mental plane, revealing itself in the form which I have designated as 'mental allergy'. We must therefore interpret the anti-foreign attitude as a condition of mental allergy.

One of the most striking phenomena accompanying allergic conditions lies in the enormous discrepancy between the original cause and its manifestations. A minute substance, quite harmless in itself, can provoke an acute allergic shock. I have dealt with this matter in my book *Allergic Man*.

The element of contradiction, both mental and physical, is one of the chief characteristics of allergic individuals. This circumstance would appear to explain the many and great contradictions observed in the behaviour and attitudes of the English which lay them open to so much misunderstanding by foreigners.

The subconsciously maintained feeling of superiority leads, as I have mentioned, to a sense of self-assurance, which is outwardly manifested in its over-compensated form as shyness and inhibition. We must consider these two attributes as instinctive reactions in which can be recognised the involuntary levelling tendencies.

Nevertheless, it must be clearly borne in mind that the great qualities of the English, their intuitive and inventive genius, are not due to over-compensation, but are strictly in accordance with genuine superiority,—a superiority which is inherent in the living substance of the nation. And this leads me to a most interesting comparison.

As stated, most of the accomplishments of the German nation, due to over-compensation proceeding from an inferiority complex, have not only been achieved through enormous effort, but have been proclaimed with great emphasis. This accounts for their tendency to glorification which in itself is but another sign of over-compensation. On the other hand, most of the great discoveries and inventions made in England are carried out quietly and unobtrusively.

This characteristic of the English is shown in another national peculiarity. I refer to their insistence on brevity in all their statements. They declare that what is essential can and should be put in a nutshell. How often at an international congress have we been amazed to observe that some vital and even revolutionary scientific contribution offered by an Englishman has been so abbreviated in form and presentation that it might easily have been completely overlooked. This tendency explains why so many of the greatest discoveries and ideas of English scientists have never been followed up by their own countrymen, but have been left to be worked out and elaborated by scientists of other countries. I need only refer to the case of Faraday.

Why else is it that a country with such tremendous intellectual endowment and one which has produced so many discoveries

representing milestones in the history of Science and Learning should, for instance, never have created a great medical centre? Why was it that their new ideas and discoveries were never followed up by their own countrymen, but were always left to be garnered by the scientists of abroad?

The answer is that without extensive elaboration of a thought or principle, without endless checking up, repetition and variation, it is impossible to create a medical school. The pupils must become interested in the problems and in the work of their teachers, and they must, moreover, be required to work out an idea themselves in all its manifold details and implications. There is nothing in Nature which is purely black or white, right or wrong. Every medical idea involves so many interrelated problems that these must be elaborated, developed and correlated from a variety of angles. And this illustration from Medicine applies equally to other fields of research.

Let me draw an analogy from Music. Are not all the great symphonic works based upon very few *motifs*, which are developed, repeated and varied *ad libitum*?

As stated, the great discoveries of England were not the product of systematically organised university effort, but were carried out privately and unsubsidised in a man's spare time. Edmund Jenner was a country doctor who worked independently and alone. Sydenham, too, was a simple physician, as were also Bright, Addison and others. All of them conducted their great work unaided.

We therefore see that at bottom England is indebted for her greatness to individual effort. In Germany, on the contrary, the work of the individual person is immediately sponsored by the community. In that country collective grouping has always been indispensable, and that is why Germany has been dependent upon an army or organised groups like the student corps at the universities. But from this grouping has proceeded the German genius for organisation, and it is through organisation that the country became strong. The German is ruled by duty, imposed from without; the Englishman is ruled by his sense of personal responsibility, imposed from within.

In England truth and honour are early implanted in the young. They are the powerful buttresses of her entire system of education. It is not a mere coincidence that in foreign countries the slogan 'the word of an Englishman' has come to denote the highest form of rectitude. The genuine ethical superiority underlying this national trait is shown in an extreme distaste for all forms of boasting, cant and 'jingoism'.

Thus the national imperfections are powerfully counter-balanced by the great ethical qualities which have enabled England always to maintain her position against great odds.

A second dominating English 'taboo' is also closely associated with the fostering of the national sense of superiority. I refer to the 'taboo' against any demonstrations of feeling. A very searching and skilful analysis of the origin of this 'taboo' was made some years ago by Dr. G. F. T. Renier in his book *The English: Are They Human?*<sup>2</sup> As the result of a careful study of the history and customs of the English, Dr. Renier has shown that whereas the English gentleman of Elizabethan, Restoration and even Georgian times was distinguished by an exuberance of manner accompanied by a total lack of reticence, which indeed frequently evoked considerable continental criticism, early in the nineteenth century a drastic change of external behaviour had to be enforced, to meet the growing threats to the upper classes consequent upon the upsurge of democracy and of the industrial classes. The explanation of the methods whereby this change was effected, largely through enlisting the services of Dr. Arnold of Rugby, are so interesting and illuminating that I cannot do better than to refer the reader to this most stimulating book by Dr. Renier.

This revolutionary change had its centre of operation in the public schools. Now, as is well known, the English public school boy is not distinguished by the extent or depth of his knowledge or learning. The prime object aimed at is to produce character, self-reliance and leadership, and the attainment of this end is effected by the suppression of the emotional side of a boy's nature. He is taught to conform to a type, to adopt a uniform external bearing. But this fact it is which accounts for the astounding prevalence of hyper-sensibility in all its manifold manifestations and variations. For the boys lose their individuality, they miss a richness of life which can only be acquired by persons capable of weeping, of showing their feelings, and of entering into the heritage of a full enjoyment of life.

Instead they are taught to conform strictly with the dictates of 'good form' and to avoid the many enigmatical and apparently arbitrary 'taboos' which are imposed. A newcomer would probably lose caste for the entire period of his schooldays should he permit his parents to show any demonstration of affection when they come to visit him on 'field day'.

For custom has decreed that if he is to be a success in life and worthily to occupy a place of eminence and distinction he must learn to wear a mask. Thus moulded at an impressionable age to

conform with a type of strict uniformity, he early becomes a loyal and lifelong devotee of the great British God of Public Opinion.

I think such a biopsychological analysis may help to clarify some of the puzzling and often unaccountable aspects of a nation's character. The manner in which the artistic mind of a poet like Grillparzer senses both the greatness and main characteristics of the English is well expressed in the words quoted above.

And what a delightful and superior person the Englishman is at his best, seen in those rare individuals in whom we find, erected upon this 'rock of Gibraltar' of integrity, a superstructure of intellectual and cultural breadth of vision and tolerance, mingled with an appreciation of the best that other nations have to offer. This is the kind of Englishman that has provided the Empire with her best type of 'Proconsul', men who have so successfully mastered and ruled the less advanced nations under British sway.

Anyone who has lived in a mixed cosmopolitan community (such as pre-war Shanghai) knows that, even though the British may—and most probably do—represent an intellectual minority, they nevertheless automatically always occupy the dominant position in such a group. The secret lies in the fact that whereas other nations wish to be admired for their accomplishments, the English prefer to be respected for their character.

The English themselves are the only losers through the curtailment of their emotional nature. But when we survey their great achievements, effected through discipline and leadership, qualities which have enabled them so efficiently to 'police' the world and earn the respect of the 'inferior' races by virtue of their Olympian aloofness and impartiality, we foreigners can have no quarrel with this self-imposed limitation of personality.

If finally we ask what are the factors responsible for England's greatness I must reply: Her adherence to tradition and her tolerance, which is a part of her tradition,—a fact for which all foreigners must be profoundly indebted to her. What else were 'Dunkirk' and the 'Battle of Britain' but exemplifications of this deep-seated sense of tradition? For it is exclusively thanks to Great Britain that humanity has been preserved and that the ground could be prepared for the renaissance of the world, for the freedom of mankind.

From this day to the ending of the world, . . .  
We in it shall be remembered;  
We few, we happy few, we band of brothers!<sup>1</sup>

<sup>1</sup> Shakespeare, *Henry V*, Act IV, Sc. 3.



## XXII

## THE JEWISH PROBLEM

IN dealing at some length with the biologic conception of the adaptation of the individual to his environment, I have endeavoured to show the biologic basis of both culture and civilisation. I tried to establish a sound distinction between culture bearers and culture mediators. I also endeavoured to analyse Germany and England from a psychological aspect.

This I did with a definite object in mind. It was to prepare a basis for a thorough discussion of the Jewish problem, as viewed from a biologic-psychological angle. It seemed desirable to gain a complete understanding of all the various aspects of the perennially urgent Jewish question.

I am of the opinion that everyone wishing to discuss the Jewish problem should read the two profound studies of Jacques Maritain, 'A Christian Looks on the Jewish Question' and 'The Mystery of Israel'. The last-named is an essay from the collection entitled *Redeeming the Time*. Jacques Maritain, a prominent and ardent Catholic and a leading representative of the Thomist philosophy, considers the problem of Israel from an ethical and historic point of view. Indeed, so searching is his analysis that I feel that all further treatment of this question should take his views into consideration.

I will try to discuss this whole problem from a totally different angle,—from my personal biologic and psychological standpoint.

What strikes us very forcibly is the co-existence and continual intermingling of two antagonistic principles within the Jewish people. These principles become intelligible if we interpret them as a superiority and inferiority complex respectively. I think that most of the specific characteristics of the Jewish people are determined by these two antagonistic complexes, which again are the result of and can be traced back to biologic and psychological events.

Why should the Jews suffer at the same time from both a sense of superiority and one of inferiority? What is the explanation of such a peculiar condition?

To take the first point,—why, we must ask, should the subconscious of the living substance within the Jewish people be burdened with a superiority complex?

In answering this question we have only to recall the fact that

from the very outset of their history the Hebrew people were taught in the book of Genesis that they were the Chosen People. Moreover, they were told that they would have to suffer for their faith in God in order to prove themselves worthy to be His Chosen People. Finally, the whole of Christendom is indebted to the Jewish people for the Bible which has supplied the basis of the Christian religion. Let us never forget that the Jews have given to mankind in a new revelation the ideals of Christianity, the founder of which was himself a Jew. This distinction definitely stamped the Jewish people.

Surrounded on all sides by a world submerged in paganism, polytheism and idolatry, the Jews were the first people to receive the enlightened ideal of a world governed by one supreme and beneficent God. They were educated in the belief that they were selected to fulfil a high mission and that they were destined by the Almighty to convey this one true religion to the rest of the world. Do we clearly realise to what an extent such a belief influences the whole trend of thought and therefore, subconsciously, the whole bearing of an individual or of a people? And do we understand that the fact of their belonging to the Chosen People must have led to jealousy and envy among all the other nations,—a factor which was responsible for the first outbreak of anti-semitism?

But there are two other cardinal facts which must be taken into account. Let us remember that the Jews were moulded by more than five thousand years of training to a distinct and definite mode of feeling and thinking. The effect of this education was to produce a characteristic mentality which can be designated as the Jewish mentality. And it is just this peculiar mentality which serves as a link connecting all the various types of Jews.

Despite the greatest diversity of individualities and nationalities resulting from the various specific environmental influences to which they were subjected, Jewry has always constituted one homogeneous body. The Jews are united by a common past, by common sufferings, by education and by all their inherited mental habits. What is the characteristic of their education? It is by no means education in thinking only, but rather a training of feeling, an education of the heart. There is one striking feature in this which should never be overlooked, as it represents an essential element of the Jewish people. They were definitely taught to show their feelings and emotions, and this tendency is incorporated in some of their rituals. Thereby this expression of feeling became subconsciously a part of their heritage. For instance, when

a parent dies the children are compelled to sit barefoot and to pray for a whole week, and during certain parts of the prayers they must bow their heads and beat their breasts. These actions, as we know, are merely symbolic, but symbolism is one of the chief elements in all ritual and is indispensable to mankind. Moreover, the Jewish ritual strictly forbade the wearing of mourning by the orthodox Jews, as at such a time the thoughts might not be diverted from grief in any way, but had to reinforce the inner life through introspection. This demand for concentration within the sphere of feeling inevitably led to an intensification and deepening of the inner life. Let us not forget that the soul is an entity and is anchored in traditional tenets.

If we analyse the essential elements of the Jewish ethical standards, as incorporated in their Bible, which have become the guidance for their general bearing and attitude toward life, we find four dominating principles: Justice, Fraternity, Equality and Knowledge. These four factors constitute the basic elements of the Jewish moral code.

These qualities have survived from primitive times and have become a vital element of the subconscious heritage of the Jews. The Old Testament insists always upon faith in God and profound respect for His Law. Thus it is that the law of Justice, the pre-eminence of Knowledge, have been the major influences in the Jewish mentality since the dim ages of the past. How deeply rooted this belief in Justice is in the subconscious of the Jewish people can be shown by an illustration. In times of danger their spontaneous outcry is always 'Great, righteous God'. I have previously mentioned the fact that language always represents the documentation of old experiences and memories submerged in the subconscious.

I think the above remarks will explain what I mean by saying that there exists in the Jewish people an inherited subconscious sense of superiority. The conviction of being chosen and entrusted with an exalted mission, their belief in the rights of man and in the power of knowledge conveyed to them in manifold ways by the Talmud, could not fail to produce a unique state of mind of being superior, which gradually became established as a superiority complex. This mental state still persists to-day as an inherent element in the subconscious of the Jewish living substance.

Now let us turn to the second characteristic feature—the sense of inferiority. This feeling became converted into an inferiority complex as the result of the biological environmental conditions to which the Jews were subjected. We must remember that the

Jews should be considered neither as a separate race nor yet as a nation, but as a people, the Hebrew people. They are the only people in the world without a home of their own. From the very beginning and throughout their history they have been exposed to persecution and isolation. Their national independence has always been threatened. Consequently they have been involved in a continuous struggle for existence, for the building up of a new life under novel and strange conditions. It is obvious that as a result of these conditions all those instincts which enable human beings to survive were powerfully influenced and developed. Since Darwin and Lamarque we know that the survival of the fittest in the struggle for existence is one of the most fundamental principles of evolution. Consequently, just those factors and faculties which are indispensable in the struggle for existence became powerful determinants in the whole Jewish attitude toward life. As a result the Jews early became accustomed to adapt themselves to every form of environment, and the faculty of assimilation, or rather, of adaptation, became a marked attribute of this people. Although they were compelled to live in ghettos, they were by no means eager to leave the seclusion of the ghetto and to mingle with their less enlightened gentile neighbours; for they were much too closely wedded to a mode of life dominated by the four principles of their religion and preferred therefore to dwell in their largely self-imposed isolation. Accordingly their remarkable power of adaptation and assimilation had no opportunity of manifesting itself to the outside world until about the second half of the eighteenth century. Then a remarkable thing occurred, considered from the Jewish point of view. The first tocsin of emancipation was sounded by Rousseau and Voltaire and the other liberal thinkers of France, summoning the peoples of Europe to throw off the bonds of oppression and injustice. Thus the time was ripe for the Jews and they were not slow to seize the opportunity opened out to them also. For it must be recalled that hitherto they had not been permitted to follow any profession, but had been restricted to commerce and the Jewish orthodox learning. This fact accounts for the astounding ability they developed in financial matters. Their powers of assimilation and adaptability are remarkably displayed in the manner in which they responded to this new opportunity, manifested especially in their subsequent international expansion. If we survey the vast contributions made by the Jews to civilisation, it is quite apparent that the modern world has been immeasurably enriched by this new cultural admixture. Why is it, then, that in spite of this intermingling and

of their ready adaptability they still retain their own distinct mentality and characteristics? The cause, in my opinion, lies much deeper than is generally believed, for this mentality is rooted in the heart and soul of the Hebrew people. These traits are the subconscious heritage of ages of intense longing and suffering,—of the sorrows of Israel throughout its whole history. These experiences have fortified, intensified, deepened and broadened their souls. Moreover, every Jew bears the tragic stamp of the 'Wandering Jew'. And this tragedy is inherent, even if dormant, within the plasma substance of the Jews. This factor certainly represents the biologic basis of the 'Mystery of Israel', and this biologic condition must inevitably have led to an inferiority complex.

Can it be fully understood that a people, despite continual oppression and persecution, can still survive? In the face of such great hardships such survival is only possible if it is animated by an ideology. Lacking this it will vanish from history. If the people of Israel, scattered as they have been over all the globe, have nevertheless maintained their own integrity and have remained united, this was exclusively due to their religion, their ethical standards, to their deep-rooted faith in one supreme God and their belief in Justice.

After all, this high ethical standard maintained by the Jews is not surprising if it is realised that the world owes them nothing less than the Bible. Every word of the Old Testament and most of the fundamental principles of the New Testament were actually written and transmitted by the Jews. 'Love thy neighbour as thyself', which became the central precept of the Christian religion, is found in the third book of Moses and was the basic law of the Jews. Why should such a people not be animated by a feeling of superiority, especially at times when the world chooses to consider and treat them as second-rate? All the factors which have contributed to their inferiority complex could not but be offset by their conviction of really being superior.

I therefore venture to say that whilst the biologic conditions developed this inferiority complex, the psychologic conditions produced and enlarged the superiority complex. Thus there arose a conflict between the biologic-psychologic factors, which throughout the history of the Jews have been closely interwoven. And this continual conflict between the two elements accounts for many of the contradictory attributes and characteristics of this people, which have rendered them both attractive and repellent to the outside world. It has, moreover, resulted in a unique dualism which has always been evident in the Jews, many aspects of which

can be traced back to the mechanism of over-compensation operating in association with their individual ideology. The existence of these two contradictory complexes helps one more readily to understand the manifold features of the Jewish people.

The necessity of building up a new life under strange conditions endowed them with increased ability, greater assiduity and alertness. I quote the words of Mrs. Eleanor Rathbone, that noble figure to whom all Jewry, and particularly the refugees, are indebted: 'Taken as a whole the Jewish race is remarkably gifted and industrious. In every profession and industry where they are allowed to compete, Jews are apt to succeed out of proportion to their numbers.' The Jews have obviously had to be more diligent and painstaking than their gentile neighbours, since they have always had to fight for their *Lebensraum*. They have always had to overcome prejudice and the jealousy that resulted from their efforts and achievements. But it should be emphasised that, despite the compromises they have been compelled to make in consequence of this constant adaptation to a new environment, the Jews have never compromised with the dictates of their inner life. They have adhered to their own religion and to their ancient traditions in the face of all their struggles. Moreover, the compromises with materialism imposed on the Jews were over-compensated by their aptitude and urge for learning and abstract thinking. They always remained profound students of the Talmud and keen interpreters of the Bible, which served to fortify their exalted and rigid standards of life and conduct.

The discrepancy between the superiority and inferiority complexes was destined to become their fate and to shape their character and genius. It accounts for the fighting spirit which is one of their most marked characteristics. Moreover, it is due to the mechanism of over-compensation that their contributions to world civilisation have been so vast and quite out of proportion to their population. In the whole world there were, prior to the Nazi exterminations, only fifteen and a half million Jews, of whom nine and a half million lived in Europe. Their accomplishments speak for themselves. Let me mention only that the Nobel Prize, which must be regarded as the highest international award for achievements in Chemistry, Medicine and all the branches of science, has been awarded to twenty-two Jews. In natural science alone fifteen were Jews, amongst whom names such as Ehrlich and Einstein will live in history. But it would take pages to mention all the Jews who attained fame, not only in Medicine and Science, but also in literature and the arts. Suffice it to mention Sarah Bern-

hardt, the violinist Hubermann, Kreisler, Jehudi Menuhin, and the famous conductor Bruno Walter. The circumstance that the Jews have always represented such a large percentage of all executive artists is accounted for by the fact that art is the supreme form of giving vent to long-pent-up longings, sufferings and emotions. Without suffering, no depths of feeling!

But at this point we have to emphasise another significant fact. The more the Jews became emancipated, the more did they adapt themselves to their chosen environment. As a consequence they became thoroughly imbued with the culture and civilisation of this environment. Whilst therefore recalling the many contributions of the Jews to world civilisation, it must be admitted that these have never shown any traces of a purely Jewish culture, but have always reflected the cultural influence of their respective environment. Evidences of a purely Jewish culture can only be found in those centres which have adhered to the strict orthodox traditions.

Considering this from a biopsychological point of view, it becomes evident that, while the Jewish mentality subconsciously exhibits traces of both the inferiority and superiority complexes discussed above, the most prominent influence noted is that of environment. For environment it is that primarily determines the Jewish personality, which must therefore always be understood as the integration of the Jewish mentality and the environmental factors. Hence the traditions which the Jews represent must not be interpreted as purely Jewish, but always as the joint expression of inherent Jewish individuality and of acquired environmental influence.

In view of the fact that the achievements of the Jews, in whatever field of human endeavour, have never borne the stamp of national or specific civilisation, but have always reflected the genius of the country of their adoption, we cannot speak of Jewish culture, Jewish music, or Jewish medicine. But it must be emphasised, on the other hand, that the Jews are to be regarded as the supreme example of culture mediators in the history of the human race.

Not only were the Jews eager to intermingle with their environments, but they exercised their power of adaptation and assimilation to such a degree that they became the most loyal and helpful supporters of the various countries of their adoption and the most faithful representatives of their civilisation and culture. In other words, they became *plus royaliste que le roi*.

It is obvious that a people which possesses no country of its own, no specific environment, a people which is continually compelled

to settle down in strange surroundings and to adapt itself to these new environments in order to become incorporated in them, a people incessantly concerned with the struggle for existence and survival,—it is obvious that such a people must develop great dynamic attributes and individualistic tendencies, for without these it could not survive.

Through these dynamic qualities, which were compelled to expend their energy in countries not their own, the Jews have become the great catalysers of the world. They are in the truest sense an example of culture mediators. From a biodynamic point of view they must be regarded as biocatalysers, operating as a most powerful leaven. This is a point upon which I have dwelt in the chapter dealing with the minority nations. This interpretation, moreover, explains the biologic destiny of the Jews.

It would carry us too far to attempt to survey the entire history of the Jews from a biologic-psychologic aspect. I have mentioned it here because I feel strongly that the discrepancy between the biologic conditions and the psychologic state of mind has never been sufficiently stressed. How great must be their ethical strength, how deeply rooted must be their belief in God, in the grandeur of their mission! In the fact that despite all the hardships suffered throughout the ages the Jews never abandoned their religion, their belief in God and in their mission to humanity, in these facts I recognise the 'Mystery of Israel'.

At all times the Jews have been the targets for blame and persecution. This is well pointed out by the late Earl Lloyd George, who says: 'In the eyes of the fanatics the Jews can do no right. If they are rich, they are birds of prey. If they are poor, they are vermin. If they are generous—and there are no more liberal benefactors than the Jews—they are giving for some ulterior motive. If they do not give, then "What would one expect of Jews but avarice?"'

One part of the pressing Jewish problem has been tragically solved through the wholesale massacres carried out during the past five years.

If to-day we ask who are the greatest victims of this war the bare figures will supply the answer. Seventy-five per cent. of all the Jews in Europe have been exterminated. Their suffering has been incalculable and inconceivable, and they have been deprived of all means of self-defence. Yes, indeed, the people of Israel stood alone, and I repeat, it is this tragedy of Israel which represents the continual 'Mystery of Israel'. For it is nothing less than a mystery how, despite all their tragic experiences in the concen-



tration camps, despite all the humiliations of being treated as refugees, they have nevertheless had the courage to stand up and persevere in their fight for existence, for survival. Moreover, to quote General Smuts, Prime Minister of South Africa: 'In the years following the war, it will surely be remembered that whoever else failed or faltered, the Jews played their part by the side of the Allies.'

And let me again quote Mrs. Rathbone: 'In these days, everything which expresses or encourages anti-semitism may do incalculable harm. Hitler himself testified to Rauschnigg its value in perverting the minds of his followers. "Anti-semitism", Hitler declared, "is a useful revolutionary expedient. I have often made use of it and would so do again in the future. Anti-semitic propaganda in all countries is an almost indispensable medium for the extension of our campaign."'

As I have endeavoured to show in my chapter on the Collective Soul, it is very easy to influence people in a definite direction. Nothing is simpler than to incite the masses by provoking their lowest instincts of hatred, jealousy and envy.

It is natural that the Tragedy of Israel should have reawakened the idea of a Jewish National Homeland and, incidentally, the Palestine question. Let me add a word to this pressing problem.

Even Theodore Herzl, who later became the father of political Zionism, was at first a supporter of assimilation. He never thought of Palestine as a natural fatherland of the Jews. Only when the Dreyfus Affair in Paris made him aware of the strong undercurrent of anti-Jewish sentiment existing in most European countries, did he plead for a homeland for all the oppressed Jews. But let me ask: If an American whose ancestors emigrated from England or France or Germany a century ago never thinks of regarding these countries as his home, why should it be expected that a Jew, whose ancestors left Palestine some 2000 years ago, should consider that country as his homeland, rather than the one where he was born, where he spent his impressionable years, the country in which he was brought up and educated? Palestine can certainly not be regarded as the home of the Jews, for the concept of home connotes the centre of a person's activities, the circle in which he grew up, and first and foremost, the cultural centre to which he owes his development. My own knowledge and achievements I owe exclusively to Vienna and its medical school, to the whole cultural atmosphere of Vienna, and certainly not to any Jewish influences.

As an illustration I should like to quote the writer Arthur Schnitzler, who deeply loved Vienna and felt that it alone was his

home, however deeply he sensed that at heart he was a Jew. In one of his plays he says: 'Though all who have dwelt in this land from time immemorial were to shout in my face the epithet "stranger!" and though they were even to erect the stake for me, neither their threats nor their hate could ever destroy this feeling: You, earth, know that I have grown out of you; and you, heaven, know that it is my home on which you are shedding your brilliant light. It is not as an outcast that I breathe among you.' Schnitzler, who was a great friend of Theodore Herzl, felt very strongly about the anti-semitic attitude and was greatly interested in the whole question of Zionism. But, as this quotation shows, his whole culture and mentality were imbued with the atmosphere of Vienna. His thoughts were not derived from any Jewish tradition, but were also the outcome of his Austrian environment. Only in his depth of feeling does he reveal his Jewish origin.

Can it be that the words quoted above reveal that Schnitzler already anticipated the tragic fate of his people which was to be brought about by Nazism?

The urgent question which is on every lip and in every mind is how the Jewish problem will be solved after this war. This question is vital; nay, it is fundamental. As long as there exists such a thing as a Jewish problem, mankind will not be safe from war. Let us learn from history. History has shown that the Jewish people has persisted in surviving, despite the innumerable hardships that they have undergone throughout the ages. If, therefore, this indomitable people has been able to survive for over 5000 years, it is quite obvious that it cannot be exterminated. Biologically considered, the Jews must have a task to fulfil, otherwise they would not have survived. But history has taught us much more, for it has shown that every country which has persecuted the Jews has suffered downfall and eclipse. Of this truth Spain has been the most glaring example in the past, as Germany is at the present time.

Will there really continue to be a Jewish problem? Has the world not learnt its lesson? Did not the tragic catastrophe of this war actually start with the persecution of the Jews?

After I had finished writing this chapter I lit upon Jan Masaryk's speeches, and I quote from them his memorable address of September 29th, 1943, entitled 'A word to the anti-semitics':

'Yesterday we recalled St. Wenceslas and Munich. *Les extrêmes se touchent*. To-day we should remember the Jewish New Year. The Jews are entering on their Year 5704. In America, Britain, Russia and

Palestine, the Jews are in their synagogues, praying for those most wretched of the wretched whose synagogues the German barbarians have destroyed, and whom they have slaughtered in millions. The Jews have experienced much throughout their eventful history, but none of their sufferings have been so terrible, so intolerable and on such a mass scale as to-day. Our generation has been given the chance to learn a lesson from the terrible fate of the Jews. This is where anti-semitism leads. And to-day I should like to tell you that German anti-semitism was and is only the initial expression of the German desire to dominate others and then exterminate them. Like ourselves, the Jews cannot live freely under a totalitarian régime. Every dictatorship is cowardly; every totalitarian régime turns against them. The Germans in their reactionary cowardice and to their everlasting shame, first hurled themselves at the Jews—the most defenceless people of all. We were soon to discover that the Jews were to be followed by Social Democrats, priests and scholars, and when Hitler had finished with these representatives of freedom and progress in Germany he hurled himself at the rest of us, Poles, Belgians, Dutch, Norwegians, French, Yugoslavs, Greeks and Russians. It began with anti-semitism and it ended in a world war. Let us bear this well in mind.

The Germans tried to incite our people to anti-semitism. I have travelled a good deal since 1918, and during those 25 years I have spoken to statesmen, politicians, scholars, writers and artists. Some of them did not know much about us, but whenever the conversation turned to our country they said: "You are a great country, you have democracy and freedom, and you are free from anti-semitism." And it is not only the Jews who told me this. It is true that every nation can be judged according to its attitude to the Jews, and we behaved decently. It is also true that some Jews did not behave well. They went about the Prague coffee-houses and spoke German, even after 1933. But they have learnt such a lesson that it will be hard to find a Czechoslovak Jew who would wish to repeat these mistakes after the present war. And of course we also knew many, very many, decent, modest, loyal Jews, legionaries and Sokols, and they belonged and still belong to us and are our people. Many of them are in our army in England and in Russia. As we look to the future let us vow that anti-semitism is a barbarism and disgrace that will hall-mark the Germans to the end of time. Let us Czechoslovaks, Germany's lesser neighbours, learn the lesson of this terrible war. Let us see that anti-semitism is the first step to pan-Germanism, which would stab us in the back before anybody else. This means that the Jews would be the first victims. We should be the next.

The Jews are being worse treated than anybody else. In the Polish ghettos things are blacker than in Dachau and Oranienburg. I therefore ask you to help them as well as you can. You must understand their weaknesses, and if any of these disinherited, confused, frightened and wretched people talk German to-day, in the hope that it may save

them from a worse fate, you should take it as due to the despair that makes a drowning man clutch at a straw. Do not forget that more than one Czech counsellor or factory-owner in the homeland has learnt fluent German in the last five years.

‘And to you, gangsterlings and undersized Quislings of Bratislava, I say: You should be ashamed to admit that Slovaks have been forced willingly to imitate Hitler and send Jews to their death in Poland. It is purely ironical that from our country, from the one free and democratic Czechoslovakia, the Jews are fleeing to Hungary in order to save themselves from Czechs terrorist guards, to a country in which anti-semitism has always found fertile soil.

‘After the war we shall all be poor, and the Jews poorest of all. Those who manage to escape the frenzy of the Nazis will start at scratch like everybody else. And I should like us to be able to *say to our children and to the whole world after the war that we helped the Jews with everything that lay in our power* and that throughout the horror of the German régime we remained decent people. I know you will agree with me and that you will act accordingly. May God help you. Good night and better New Year to the Jews.’

Thank you, your Excellency, for these words. May I express to you my deepest gratitude both in the name of my people and in the name of humanity!

And now let me ask the vital question: Are we not fighting for freedom, for justice and for Christianity? Finally, have not the Jewish problems been solved for all time by the Atlantic Charter? Therefore, once the laws to protect and maintain human rights and dignity have been re-established this Jewish problem will automatically vanish into thin air. Its solution will represent the culminating effort of this war fought on behalf of liberty and justice. But the persistence of the Jewish question after this war, or any further attempt at anti-semitic activities, would signify the annulling or the inefficacy of the Atlantic Charter, and this would sooner or later involve the world in a new catastrophe, which would be the final and irreparable blow to mankind.

Let me conclude by quoting Winston Churchill:

‘Many centuries were to pass before the God that spoke in the Burning Bush was to manifest Himself in a new revelation, which revelation was the oldest of all the inspirations of the Hebrew people—as the God, not only of Israel, but of all mankind who wished to serve Him. A God, not only of justice, but of mercy; a God, not only of self-preservation and survival, but of pity, self-sacrifice, and ineffable love.

‘Let the men of science and of learning expend their knowledge and probe with their researches every detail of the records which have been

preserved to us from these dim ages. All they will do is to fortify the grand simplicity and essential accuracy of the recorded truths which have lighted so far the pilgrimage of man.' <sup>1</sup>

## XXIII

### THE ATLANTIC CHARTER AND ITS APPLICATIONS

THE historic Atlantic meeting was referred to by Winston Churchill in the following words:

'This was a meeting which marks for ever in the pages of history the taking up of the English-speaking nations amid all this peril, tumult and confusion, of the guidance of the fortunes of the broad toiling masses in all the continents, and our loyal effort, without any clog of selfish interest, to lead them forward out of the miseries into which they have been plunged back to the broad high-road of freedom and justice. This is the highest honour and the most glorious opportunity which could ever have come to any branch of the human race.'

I wish particularly to stress Articles 6 and 7 of the Atlantic Charter. Article 6 reads as follows:

'After the final destruction of the Nazi tyranny they hope to see established a peace which will afford to all nations the means of dwelling in safety within their own boundaries and which will afford assurance that all the men in all the lands may live out their lives in freedom from fear and want.'

This article must be applied to its fullest extent to all the small nations. There can be no question of the small nations being compelled to sacrifice anything to the powerful nations.

A biologic viewpoint is also needed in order to visualise the vital rôle that the small nations have to fulfil in world affairs. Biochemically considered they are an indispensable element in the concert of nations. As has been so aptly stated by Willstätter, one of the greatest biochemists of our day: 'Life is the co-operation of enzymatic processes.'

If now the world be regarded as an organism, as an entity, we are able to understand the functions which the small nations in particular have to fulfil, regarded from a dynamic point of view,

<sup>1</sup> W. S. Churchill, 'Moses' (in *Thoughts and Adventures*).

that is, in the light of biocatalysers. I can amplify this concept by further quoting the great philosopher Wundt, who says: 'The component parts of organic regulation all originate in catalytic processes.'

One is tempted to speculate about the effect of the crossing of various races, thus biochemically considered. For, as has been demonstrated by Sommer, it is just in those regions where different races live together in close contact that the highest cultural achievements are attained. This will explain the great and important rôle played in European culture by the Austro-Hungarian Empire, and at the same time will make us realise how great an error was committed after the last war by the division or, more accurately expressed, by the mutilation, the demolition of this entity. Within the Austrian Empire were Czechs, Slavs, Hungarians, Poles, the whole Balkan Peninsula with all its various nationalities and civilisations. This *ensemble* was a necessary factor of unity in the centre of the European world, and it was through this interlinking of different nationalities that the old Austrian Empire was able to fulfil its important part in Central European culture. Moreover, it cannot be a mere coincidence that the greatest artists, such as Beethoven, Brahms, and any great intellectuals, should have chosen as their home Vienna, the focus of the whole Austrian Empire, the centre of light, life and intellectual radiance.

But Article 6 must also be fully applied to all matters concerning the health and hygiene of the World of To-morrow. More than this, it must become the guide that shall determine the Destiny of To-morrow.

To dwell in safety, in freedom from fear and want, are the two prerequisites for, as they are also the result of, the health of all people. Only when we have attained prevention of suffering through want can the basis be laid for the elimination of fear. It cannot be sufficiently emphasised that physical and moral health are interdependent. They are the foundations of all society. As I have previously shown, not only can the most difficult diseases be successfully combated, but they can also be prevented. Therefore prophylactic medicine and all the preventive measures must become our main concern. Let us see things in their true light.

If we wish to establish conditions in accordance with this programme, it is essential that all persons, as equal members of human society, must possess the means of living under modern hygienic conditions, irrespective of their economic standing (Housing problem). They must have the privilege of being fed in

accordance with the recognised maximal food requirements (Feeding problem). In case of illness they must be accorded the most thorough up-to-date treatment available (Health problem). In order to reinforce the urgency of these needs I am adding an Appendix with suggestions concerning the organisation of such a medical service.

We must bear in mind that after this war we shall have to deal with individuals who are exhausted in body, mind and soul. Hence our attention must be centred on the body-mind problem and its correlation with social conditions. Once for all we must abandon the idea that one state can live independently of others, and we must clearly realise that no country can be attacked or ruled by anti-human laws, without the rest of the world becoming involved. For if one part of the community of peoples is endangered, be it through epidemics, either physical or moral, or through war, the whole of mankind is jeopardised. In other words, the body-mind principle must also be conceived as applicable to the world as a whole. And such a conception, properly grasped, automatically eliminates any form of neutrality. There can be no neutrality if the life of one's neighbour is in danger.

Summarising therefore, once this war is over every human being must have the chance to earn his livelihood in accordance with his skill, ability and individual tendencies, under due observance of the above-mentioned safeguards to life and health. Furthermore, every human being must be enabled to benefit from all the achievements of culture and civilisation and to enjoy the opportunities and the beauties which the world has to offer.

Turning now to Article 7, we read the following words:

'Such a peace should enable all men to traverse the high seas and oceans without hindrance.'

Since the Prime Minister said 'The Atlantic meeting was symbolic and therein lies its prime importance', I feel justified in also interpreting it symbolically. Thus viewed, the terms 'high seas' and 'oceans' must be accepted as meaning the whole world, from which follows the natural inference that all people shall be accorded the right to live wherever they choose.

This therefore leads automatically to a consideration of the Refugee Problem, a problem that is pertinent, urgent and of the greatest magnitude. It concerns the fate of all refugees and the problem of re-emigration.

In order thoroughly to understand this vast problem we must bear in mind that human beings are so constituted that, however

great their power of imagination, they are constitutionally unable to comprehend and exactly to visualise events which they have not personally experienced. There is a fundamental difference between what one has only read or heard and what one has actually lived through oneself. When the White Paper on the German concentration camps was published at the beginning of the war, the refugees were all struck by one thing,—that most English people refused to believe the facts so baldly stated in their undisguised and frightful reality. They felt that these things were too terrible to conceive, and their universal reaction found utterance in the word 'unbelievable!'. Even to-day, after all the subsequent ghastly revelations, there are still to be found many persons who refuse to give them credence. And how pathetically alone this leaves all those poor people who have experienced these atrocities, either in their own persons or in those of their loved ones!

This psychic state of incredulity is based on a fundamental biologic law according to which the human organism imperiously rejects anything that would leave an injurious mark on the mind or would impair the mental equilibrium. Thus in the interests of self-protection we see erected this stone wall of 'unbelievable!' as an insurmountable barrier between innately kind and sympathetic persons and those who should be the natural recipients of their pity and helpfulness.

All the various experiences of life lead to a certain degree of tolerance and intolerance which, as we have seen, are biologic manifestations. But intolerance leads to hyper-sensitivity and shock reactions are phenomena of mental hyper-sensitivity. The already tormented mind has lost the power of absorption and can no longer use its reason even in unimportant matters. We must accordingly bear in mind that refugees as a group are individuals whose power of resistance is weakened and who, as the result of torments suffered at the hands of the Nazis, are mentally and physically worn out. An outsider is quite unable to conceive the nature of this state of torment which has become a part of one's very being.

How is it to be expected that the problem of re-emigration can be solved merely on the basis of legislative and social considerations? Who will be justified in deciding what persons will or will not be in a fit condition to face again their old environments with their tragic memories and associations;—the town in which their parents were murdered or their friends tortured? Every case will have to be weighed individually, for, although there will be a cer-



accordance with the recognised maximal food requirements (Feeding problem). In case of illness they must be accorded the most thorough up-to-date treatment available (Health problem). In order to reinforce the urgency of these needs I am adding an Appendix with suggestions concerning the organisation of such a medical service.

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tain number of persons providentially blessed with psychic immunity, others will be absolutely incapable of returning to their former homes and of facing past memories. No bridge connects the mentally immune with those who have been rendered intolerant. As we know, hyper-sensitivity is a condition which is based on and rooted in cell memory. Neither legislation nor the most competent committees can overlook these biologic facts.

And in addition to the experiences of the brutality exercised by the invading hordes of Nazis, we must bear in mind a second, perhaps even sadder, aspect connected with these upheavals,—sadder because it has contributed so greatly towards undermining one's deep-seated belief in human goodness and in the strength of long-enduring friendships.

I should like to cite one of countless similar experiences from my own observation. One of the oldest private nursing homes in Vienna was under the direction of a very prominent physician who throughout his life had been devoted to this institution. His daughter was a physician and assistant there, his son worked in the biochemical laboratory of the institute. The head nurse had worked for twenty-eight years in this nursing home and was devoted to the head physician, to his family, to the patients and to all the consultants. Everyone had complete faith in her loyalty and integrity. The day after Hitler invaded Vienna and the Nazis took possession of this nursing home the old Jewish physician, 76 years of age, was insulted and shut up in his private room. His daughter was compelled to wash down the stairs of this four-floor building, under the supervision of Nazi officials who continually beat her. The young biochemist was forced the whole day long to carry heavy sacks of coal from the cellar to the top of the building. The head nurse, the faithful helper of twenty-eight years' standing, calmly watched these proceedings with a smile of triumph and gave her assistance to the Nazi officials. I was a personal witness of these occurrences whenever I visited my own patients, naturally always under Nazi supervision. And we know that this is by no means an extreme case. But how could individuals thus humiliated wish to return to their former sphere of activity; for even though the Nazis should have vanished, the treacherous 'Aryans' would still remain as a constant reminder?

But more than this. No one who has not experienced what it means to be compelled, once youth has passed, to build up a new life under strange conditions, should have the right to judge and decide about the further fate of the refugees. Let us take England as a symbol of freedom. All those poor martyred souls who came

to this country and, following upon all the horrors and hopelessness of the recent past, found themselves suddenly transferred to an environment in which humanity reigned, have gradually been enabled to recover a belief in the rights and justice of man, together with a renewed faith in their own human dignity. They have experienced a profound moral and spiritual uplift which has gradually restored their hope of a new future. For after all, most of these refugees had been active and prominent workers who had forfeited both their work and social position. Many of them saw their families scattered over the face of the earth, their friends cut off from them; and the few who had the good fortune to remain united with their families had to look upon this as a special mercy of God.

Of such components is the individual soul, as well as the mass soul, of the refugees constituted. And so I ask again, who would venture to decide the fate of such persons without knowing what it is to be homeless, to be cut off from one's family, position and belongings, and to be merely tolerated in a strange country, not only as a foreigner who has to accept hospitality, but as a second-rate human being? Unfortunately only a relatively small number of refugees have been able to start life afresh under a friendly sky. Some of their wounds are now healing and they are on the road to rehabilitation and restored self-confidence. Should not these wounds be permitted to heal permanently? Have they not suffered enough?

He jests at scars, that never felt a wound.<sup>1</sup>

Moreover, have we not all begun to adjust ourselves to unfamiliar conditions, established new contacts, formed new friendships? Have we not through this newly acquired experience regained our faith in humanity? And above all, should we who during these crucial times have lived in this wonderful country which is so valiantly carrying on the fight for the freedom of the world, we who have been privileged to accept its hospitality and assistance so generously given,—should we be compelled to turn our backs on this land which has meant so much to us all? Are human beings to be regarded as mere packages to be redirected at will? Do they not possess enhanced value by virtue of the love and gratitude which animate them?

Therefore I venture to say that nobody can or should be compelled to return to his former home or to any specified place. Although there will doubtless be some persons who will wish to go

<sup>1</sup> *Romeo and Juliet.*

back, others will be quite unable to do so. We must face the fact that after all their power of adaptation is limited.

Abnormal times call for abnormal measures. I know it may appear strange that what was offered as free hospitality should now be claimed as a permanent right. Nevertheless, I feel that my plea will not be in vain, for the fulfilment of these conditions is anchored in the Atlantic Charter. The Atlantic Charter must not fail us, otherwise our ultimate faith in the rights of man and in the re-establishment of human dignity will be shattered. Are we not all striving to attain a world citizenship?

Certain it is that only by the breaking down of all frontier lines with their artificial restrictions will the goal of true freedom be achieved, and such a step is the inevitable outcome of our present stage of progress. Science, art and culture have long since abolished frontier lines and have been recognised as international. Therefore the persistence of boundaries in the physical domain in our day represents an anomaly.

Articles 6 and 7 of the Atlantic Charter will remain an immortal monument of human ideals, because with the abandonment of racial hatred and persecution it restores respect for the individual and for human dignity, as the basis of true freedom, of the Christian ideal, and of the humane and humanistic conceptions of life.

Sail on, O Ship of State!  
Sail on, O Union, strong and great!  
Humanity with all its fears,  
With all the hopes of future years,  
Is hanging breathless on thy fate! <sup>1</sup>

<sup>1</sup> 'When Mr. Wendell Willkie arrived in London in January, 1941, he handed to Mr. Churchill a verse from Longfellow written in the President's handwriting, together with Mr. Roosevelt's comment that "it applies to your people as it does to us". In August, 1941, Mr. Churchill took with him from England cards on which this verse was illuminated, and after the Atlantic Charter had been approved on August 12th, both statesmen signed the cards and each kept a copy as a souvenir of the Atlantic Meeting.' (H. V. Morton, *Atlantic Meeting*, 1943.)

## XXIV

## POSTSCRIPT

I CANNOT let this book out of my hands without adding a word in expression of my sincerest appreciation and profound gratitude to Miss Beatrice Cornell. Not only has Miss Beatrice Cornell translated large sections of the book, but through her sympathetic interest and untiring zeal, combined with her ready faculty of interpreting my trends of thought, she has proved herself to be a real collaborator and of invaluable assistance in aiding me to surmount the difficult barrier of an unfamiliar tongue.

To my publisher, Frederick Muller, who during these trying times has so generously undertaken to publish this book, I tender my sincere and wholehearted indebtedness.

## XXV

## APPENDIX

All health control should be centralised and organised as follows:

*A. Hospitals.*

*B. Institutes for Prophylactic Medicine.*

## A. HOSPITALS

The hospitals should be grouped in two categories: (a) Those associated with medical schools attached to the various universities, to deal with medical education; (b) Hospitals confined to the treatment of patients.

(a) Medical education should be based on the principles prevailing in the continental medical clinics. Outstanding clinicians should be selected as directors of these hospitals, their task being to teach the students and treat the patients. The clinics should also handle all the medical research work. The term and rôle of 'Internal Medicine' should become generally known throughout the medical world. Internal Medicine and Surgical Medicine represent the two leading disciplines of Medicine. Of

course every medical clinic should deal with every special branch of Medicine and possess special clinics for skin diseases, eye diseases, etc.

But every medical school should also possess a special clinic for Nutrition, as well as for Endocrinology and Allergy. All these medical schools should be supported by the State, as has always been customary on the Continent. In other words, the Government should pay the Director and the whole medical staff. Every clinic must have both private and general wards.

(b) The hospitals should be even more specialised, and every one should deal with one particular disease. Since the main task of a hospital is to treat its patients, it will be necessary to establish special hospitals for diabetes and other metabolic disorders; others for kidney troubles, for tuberculosis, etc.

Every diabetic specialist, kidney or tuberculosis specialist, should be attached to such a hospital serving his own branch of Medicine, so that any patient would have the opportunity of choosing the specialist in whom he has confidence and whose advice he seeks. These hospitals should be supported either by the State or the municipality, and the doctors called in should be paid for their services. These hospitals would at the same time serve as schools for the training of specialists in a given field of Medicine. The appropriate methods of treatment are to be applied to the patients and all the existing views regarding the treatment of a given disease should be represented. Every specialist should devote three or four hours a day to the hospital, retaining the rest of the day for his private practice. By adopting this continental system the whole problem of State Medical Service would be solved. But one important matter should be insisted upon, namely, that every clinician must combine private with hospital practice. For the experience derived from private practice is indispensable for the development of a good clinician, and this knowledge can never be acquired from hospital experience alone. Every clinician will agree that such privately gained experience is indispensable in order to acquire the highest skill in the medical profession, and that his hospital patients, moreover, will directly benefit from it.

## B. INSTITUTES FOR PROPHYLACTIC MEDICINE

A new type of institution for Preventive Medicine must be created where healthy subjects shall undergo compulsory annual examination. Such an institution would be the natural outgrowth of our present knowledge of the interrelation between Functional

Pathology and Constitutional Medicine. Obviously it is upon the constitution of an individual that our interest must be centred. We must learn to treat the Patient instead of treating the Disease, for we must realise that the chief aim of modern medicine is, not to treat the sick, but to prevent the onset of disease by a thorough understanding of a patient's constitution.

We must bear in mind that in the countries which have been occupied by the enemy people will be prone to contract a number of diseases, as the consequence of constitutional debility.

Whereas hitherto only the sick have been taken into consideration when the question of hospitals was under discussion, to-day we must realise the necessity of establishing institutes for healthy subjects. It is obvious that every sick person will automatically seek medical aid, but Preventive Medicine must be made obligatory and must be organised in a systematic way.

Such a prophylactic institute would not involve the state in any particular expense, because it could easily be attached, as an annex, to every type of hospital already in existence. Every hospital should be so organised as to have a special department devoted to the examination of the healthy.

Thus children would be examined at a children's hospital, women at a gynæcological hospital, whilst the examination of the internal organs would be carried out in all the various hospitals dealing with internal diseases. Of course such examinations can also be carried out on healthy subjects in private institutions; but everybody should be compelled to possess a health registration card, in the same way as he now owns a personal identity card.

The whole scheme would solve the problem of state medical service. It must be borne in mind that Medicine remains an art and that the relationship between patient and physician must be based upon personal choice and confidence. The more we know about Constitutional Medicine the better are we able to appreciate the fact that we have never to deal with a disease but with a diseased subject. Hence every doctor will and must have his own personal opinion and his own particular method of dealing with a case. In other words, Medicine must remain individualistic and therefore independent. But if all the leading consultants are officially attached to the various hospitals, clinics, and prophylactic institutions on the same basis as has always obtained on the Continent, the poorest people will have the benefit of their advice.



## MEDICAL EDUCATION

To meet present-day requirements and the need for well-trained physicians, the medical training will have to cover a longer period of study than has previously been the case. Although this training is very costly, everyone, however poor, who wishes to be a doctor must have the chance of receiving a complete medical education. To facilitate this the State must offer scholarships which will enable students to obtain free tuition. At the same time hostels must be established to provide good board and housing for the students.

## SUPPLY OF MEDICAMENTS

*I. Pharmaceutical products to be unrestricted and without profit.*

Whilst it is the main task of the doctor to treat his patients, it is essential that we be enabled to meet the requirements of any form of treatment. This directly concerns the pharmaceutical products obtainable and is a question of the greatest magnitude. We must face the fact that neither hospitals, nor sick benefits (*Krankenkassen*), nor even clinics are able to provide their patients with the best preparations on the market, for the sole reason that these products are too expensive; for, although neither vitamins, hormones, nor other valuable preparations are unprocurable, nevertheless, owing to their prohibitive cost, they are rarely administered.

*II. Decisive steps to be taken by the governments.*

The governments must take the decisive step of compelling the pharmaceutical industries to supply their products to the hospitals and to the poor without any profit to themselves. For this reason there must be an unrestricted, duty-free importation of all pharmaceutical products, irrespective of their origin. In the same way that the prices of armaments are controlled by governments, as a result of which the profits are limited and the prices controlled, the prices of pharmaceutical products should also be controlled. We must not see a continuation of the state of affairs by which we physicians are handicapped in giving proper treatment to the poor merely because the preparations are too costly and therefore their supply to the hospitals or sick benefits is restricted or even forbidden.

## ECONOMIC REASONS MUST YIELD TO HEALTH

*Feeding Problem.*

I have dealt above with the question of nutrition and feeding. Obviously nutrition must remain the basis of national health. But let me add a word in this connection. There is enough food in the world for every single individual to be properly nourished. Hence we physicians must insist that from now on no economic considerations of whatever kind shall prevent the poor from obtaining the food they need. The practice must be stopped once for all of throwing away fruit, cereals, coffee and other perishable food, merely in order that standardised prices may be maintained. Nor should any difficulties be placed in the way of the importation of valuable foodstuffs. Economic motives must be disregarded if the health of a people is to be given primary importance.

## XXVI

## EPILOGUE

As this book was written during the war its publication has been delayed owing to printing difficulties. In the meantime the war has come to an end and it now seems advisable to add a few words as an epilogue. It can now be seen that I was right in drawing attention to the important task which lies ahead of us and in claiming that a biologic and psychologic understanding will be needed and therefore physicians and other scientific experts should be included in the councils of the nations.

Innumerable mistakes have already been made due to the entire lack of psychology. Throughout the war we were continually assured that this war was a fight for Freedom, Liberty and Justice. But what has become of the ideology of the Atlantic Charter? How does the world situation look to-day? Who are the men in whom the world should have faith and whose decisions regarding the world's future should be accepted? Party politics versus world politics!

Is it not astonishing, or rather absurd, at a time when the fate of Europe and even the fate of the whole world is at stake, that party politics should have any say? The European situation upon which the world situation depends is chaotic. But we have posi-

tive evidence that the population of all the occupied, now liberated countries, all the underground movements, as well as all the inmates of the various concentration camps, always listened eagerly for the voice of Winston Churchill. And the speeches and pronouncements of Franklin Roosevelt were a source of immeasurable uplift. I have been told by people from the concentration camps what the proclamation of the Atlantic Charter meant to them. New hope, new life! The figure of Churchill became symbolic for all those oppressed and martyred people. It was the symbol of Liberty, Freedom and Justice. I have also been told how moved and encouraged they were when they heard that in the House of Commons the members had stood up for a minute of silence out of respect and sympathy for the tortured people of Poland.

But now Roosevelt's great and commanding figure is no more. And Winston Churchill, to whom mankind owes so much, he who was the spirit of the whole fight for liberty and ideals, he also no longer sits at the head of the conference table which has the tremendous task of solving all these momentous and complicated world problems. Is it conceivable that at such a grave moment in world history we can afford to be without a man like Churchill, the only man who, from his vast knowledge and experience, due to his vision and imagination, can command the full support and respect of all the nations? Who has the authority in dealing with international affairs possessed by this unique man?

Let me refer to another point of greatest magnitude. What at the present time is the position of the people in the liberated countries, and above all of the Jews? Have the Jews been asked for their suggestions and advice—they who have suffered and lost more than any others? Whilst the representatives of Yugoslavia and of Rumania have been invited to the Conference of Foreign Ministers, there has been no mention of Jews being called in, despite the fact that their deprivations and sufferings in the concentration camps exceed those of almost all the other peoples combined. Have not we Jews the same right as other peoples to be heard, to express our grievances, and to have a voice in the framing of decisions? Why should not the Jewish World Congress (by its President, the most distinguished Dr. Stephens Wise, or by the delegates of the various countries) be represented? Would it not give at least a certain rehabilitation to the Jewish people? From a psychologic point of view, and that of justice, it would accord with the concept of the Atlantic Charter.

But instead of such an attitude being shown, we have to witness

that a newspaper like *The Times* should be insisting that refugees must now leave this country because their homes have been liberated. Where are the liberated countries? Are they fit for re-emigration? As regards the Jewish refugees, they do not possess any liberated homes. Upon their return the Jews would be confronted by the same anti-semitic hostility, increased tenfold since it was first nurtured by the Nazis. The refugees did not come here voluntarily; they were forced to come in order to save their lives, their families, and to escape from imprisonment and murder in a concentration camp! The attitude shown by *The Times* and other papers is astonishing and significant! What a lack of understanding!

With regard to the refugee question I wish to mention one additional point. No refugee was permitted to enter into Great Britain or the United States unless he had some guarantor to furnish the necessary financial help. Lacking this help, emigration was impossible, and nothing remained for the Jews but the concentration camps. If Palestine had been open to them the massacres of the Jewish people might have been averted. And if now, at the end of the war, all these facts are not clearly revealed and clarified at the conference table, I can only prophesy a new catastrophe!

Since writing the above paragraph I have read the letter of Lord Horder, addressed to *The Times*, dated September 21st, 1945. It so admirably expresses my own opinion that I cannot do better than quote it in its entirety.

### A HOME FOR THE JEWS

*To the Editor of 'The Times'.*

141, Harley Street, W.1., Sept. 21.

Sir,

The letter which you publish this morning from Mr. Izzat Tannous mentions one aspect of the Palestine question, the mandatory system, and letters dealing with other aspects have recently appeared in the columns of your paper. But while the pros and cons of the various solutions propounded are being weighed from the standpoints of equity and expediency, politics and strategy, the desperate plight of the Jewish survivors in Europe and the crucial urgency of their rehabilitation—subjects to which Miss Eleanor Rathbone drew special attention—are liable to be overlooked. Yet these are matters of primary and grave responsibility.

During the war, six million Jews were put to death in Europe. This was the heaviest toll of life that any people has suffered, equivalent proportionately to the extermination of thirty-three millions of the

people of this country. They were slaughtered far behind the enemy lines. No way was found of rescuing them from the jaws of death because we ourselves were engaged in a life and death struggle. But on the eve of the war we adopted, and throughout its course maintained, an extremely restrictive policy of immigration into Palestine, which paralysed capacity to rescue while rescue was still possible. It is thus unfortunately true that, had the doors of Palestine remained open, tens—if not hundreds—of thousands of those asphyxiated and burned wholesale, including very many children, might have been alive to-day.

Does not this terrible catastrophe impose on us a supreme obligation towards the surviving remnants? We hear poignant tales of the sufferings of the people of Europe, both defeated and liberated. But all these peoples, entrenched in the physical possession of their countries, have a secure future, however tortuous and hard the road towards it. Not so the Jews. Is it fair to expect them to rebuild their shattered lives among the tombstones of their fellows? Uprooted and homeless, where in liberated or conquered Europe are they to feel secure? Is it not doubly incumbent on us to spare to ourselves and Jewry alike the ignominy of further suffering and death among the liberated Jews of Europe, if they can be avoided, by swift action? There is this further practical consideration, that already the number of refugees and displaced persons in Europe is proving an almost insoluble problem. The removal of 100,000 Jews would do something to ease the situation.

The Jewish Agency for Palestine has, I think quite justifiably, urged that Palestine be constituted a Jewish commonwealth. At the same time the Jewish Agency has asked that 100,000 immigration permits be immediately authorised to enable it to meet without further delay the most pressing needs. Cannot this request be satisfied as an urgent interim measure? Or is it really thought conceivable that the policy of 1939, to which we resorted in a moment of weakness, and which even at the time was condemned by the leaders of the present Government and by the leader of the Opposition, should be suffered to impede the salvation of the war's worst sufferers, now that victory is ours?

Yours faithfully,

Horder.

Now let me turn to another aspect.

The first thing one would have expected in the liberated countries is that all ardent Nazis would have been removed at once. But what has actually happened?

Clemens Krauss was the Director of the Vienna State Opera until 1934. He was an ardent Nazi and left the Vienna State Opera at Hitler's request in order to become the Director of the Berlin State Opera. This happened immediately after the assassination of the Austrian Chancellor Dolfuss. During all that time he worked in Berlin and Munich. Nevertheless, after the liberation of Austria he was the first person to be called back to

Vienna! If this kind of thing has already occurred, one wonders what will happen in a few months' time and one is tempted to ask the searching question: Who are the losers and who are the winners of this war? I fear I must reply that the winners are the Nazis in their new disguised form.

I should not be at all surprised to learn that the unnamed pretty and charming opera singer from Vienna who went to the Belsen concentration camp to entertain „Herr“ Kramer is still a member of the Viennese opera. Why not mention her name and why not blacklist that type of person who has supported the criminals, whether it be Professor Sauerbruch, now Minister of Health in Berlin and formerly Hitler's medical adviser, or anyone else. We know beyond a shadow of doubt that men like Sauerbruch who led German medicine must have known, like all the other physicians in Germany, what was going on in the concentration camps, for the experiments conducted there cannot have remained hidden from them.

Let me enlarge somewhat upon this point. It would have been expected that immediately after the war the Allied Authorities would or should have been particularly anxious to promote those anti-Nazis who were compelled to leave their country. That would have been the way to start real reconstruction. But let us look at the situation as it really exists. All the many actors, actresses, singers and other artists within Germany and the occupied countries have worked untiringly during the whole Nazi régime and have earned their money and maintained their positions. And they were only able to carry on their work because they were Nazi-minded, or at least not anti-Nazis! But during this whole period all the artists who were compelled to seek refuge in other countries were handicapped in carrying out their work abroad because they were regarded as foreigners and therefore were excluded from competition. And now they receive no support from the Allies in being brought back to their countries and restored to the positions which they formerly occupied and which they deserve more than any others. On the contrary, it is the same group of artists who have consistently collaborated with the Nazis who are still retaining their positions. They earned money before Nazism, during Nazism and after Nazism, whilst all the others, the Nazi opponents, could neither work abroad, since they were regarded as foreigners, nor will they have the opportunity to work in their former homelands, on account of being considered re-emigrants. In any case, all the positions will be already occupied. Is this due to ignorance or design? If it is due to ignorance

we must vehemently protest and expose the fact, for it is essential that this truth be known if we wish to rebuild a new world. If, on the other hand, it is due to design, we must emphasise that such a disgraceful state of affairs bears within itself the germs of future disaster. But whatever may be the reason we, the witnesses and sufferers of the tragedy of our time, are not only determined but compelled to protest. And more than this, we refuse to accept this manner of settling our affairs. I deliberately say 'our affairs' because it is our own lives and the lives of our children which are involved and which are again at stake. Not the lives of all the various statesmen and diplomats!

Now let me point out another item. I am glad to be able to refer to an article published in the *Observer*, under the heading of 'Soldiers—But not Citizens', which reads as follows:

'A British Officer raises the point of an anti-Nazi alien who was so far trusted by this country that he was allowed to be a combatant soldier and commissioned. He was one of the first to land at Salerno and suffered severe physical damage. Yet in civilian life this soldier of Britain's army is not—and at present cannot be—a citizen. Naturalisation is denied to men of his type, and on release from uniform he must submit to the police restrictions imposed on "dangerous elements". An alien in the American Army is naturalised on joining his unit. A number of similar and gallant combatants are now being demobilised and left in complete uncertainty as to their future status. This is gross injustice. If these men can be trusted in the front line of the British Army, they have surely earned a place on the citizens' roll.'

From the fact that a recent article in the *News Chronicle* voices itself equally emphatically on this point, may we hope that these injustices will shortly be rectified?

For is it not astounding that all our boys who have served so faithfully in the British Army should still not be deemed worthy of naturalisation but should continue to be regarded as aliens, and even as 'enemy aliens'? A great number of these refugee soldiers have lost their lives in military service. Moreover, the services of the Pioneers were greatly appreciated and the excellent work performed by our members in the Intelligence Service is well known. All refugees serving in the American Army have automatically gained American citizenship. Why is this not so in Great Britain?

Instead of this we are continually asked the same stereotyped question: 'When will you go home?'<sup>1</sup> It is high time that a stop

<sup>1</sup> May I refer to a most alarming and objectionable article on this subject which appeared in *The Times* of Sept. 4th, 1945.

was put to such questions. If the people of this country have even yet not realised the conditions prevailing on the Continent there is no hope of their ever learning their lesson. Can one speak of 'going home' to a country from which one was forced to escape and where all one's former ties have been broken; where one's relatives and old friends have been exterminated or tortured beyond recognition?

For those of us who came from Vienna, we can gratefully recall the eloquent reference made to that city by Winston Churchill: 'We remember the charm, beauty and historic splendour of Vienna, the grace of life, the dignity of the individual; all the links of past generations are associated in our mind with Austria and with Vienna.'<sup>1</sup>

Now Vienna lies in ruins. All our former friends are no more. They have been murdered, tortured or forced to emigrate. Moreover, all the anti-Nazis were practically exterminated. And the only people we shall now find when we return are those who were poisoned by the Nazi doctrines and who are now skilfully playing the game of never having been Nazis. But we who know them have no faith in their protestations. What, then, does 'home' mean to us? A country without relatives; a country in which every stone reminds us of all the atrocities committed against our former friends, and above all, a reminder of the Jewish persecutions and exterminations. The Jews were not even represented at the Potsdam Conference. Who, then, will have the right to settle the fate of any Jew? Since none of the various representatives summoned to the Conference Table have tried to protect us and have certainly not succeeded in doing so, I think we can justly claim that they have not the right to decide about our future life.

Therefore let people stop asking 'When will you go home?' before such a home has been re-created.

I recently met an old friend, one of the most prominent physicians of Czechoslovakia. In great distress he said to me: 'I cannot return to my country. I have not a single soul who has survived. My old mother was killed; my brother and his son were gassed; my two uncles were poisoned; my two aunts tortured to death. My best friend, a highly esteemed doctor, was shot before the Army of Liberation could arrive. All my friends are either dead or abroad. Now can anyone regard such a place as "home"—

<sup>1</sup> Words spoken on the occasion of the presentation by the former Austrian Ambassador, Sir George Frankenstein, in the name of the Austrian refugees in Great Britain, of a mobile canteen, as a gift to this nation.



a country in which one's whole family and all one's friends have been annihilated?' And this applies to thousands of us. Who can say whether any of those persons whom we should meet again if we returned have not themselves been responsible for the deaths or tortures of our beloved ones?

In the foregoing pages I already anticipated the danger of new weapons being invented, and so I need only draw the reader's attention to pages 107 and 186. Now we are confronted with the alarming facts of the atom bomb.

After this latest scientific disclosure I immediately wrote a letter, in which I stressed the most significant fact that whereas five hundred million pounds had been spent on the atom bomb, no money was forthcoming to produce sufficient penicillin for the alleviation of human suffering. But neither *The Times*, the *News Chronicle*, nor the *Evening Standard* published my letter. This merely confirms my conviction of the imperative need of an international league of physicians. This international league of physicians has to insist that further scientific inventions aiming at destruction must never be permitted and thereby counteract the anxiety and fear produced by the discovery of the atom bomb. -

Let me give another example which will show the importance of an international league of physicians. It is a well-known fact that before the war there existed in Czechoslovakia two universities, representing two schools of Medicine, one Czech and the other German. Everyone had the right to take his degree in either school, which had equal recognition in Czechoslovakia. Now doctors returning to Czechoslovakia but possessing the degree of the German University of Prague are no longer permitted to practise in that city but are compelled to go to the small towns of Sudetenland. Moreover, Czech students of Medicine who during their emigration and the war took the British degree of Medicine are not recognised as physicians, but are compelled to take the Czech degree before being permitted to practise. What does this all mean? Was it not enough for these persons to take their degree in a foreign language? In such an extraordinary time, why has the British degree no recognition? That is a point on which I have dwelt in my chapter on Medicine.

Thus we are compelled to ask whether this war has really brought us any nearer to the attainment of universal brotherhood, or whether it has not rather produced a heightened sense of nationalism and an intensification of the frontier complex. We fear we have great cause to apprehend the latter condition, for even in London itself we witness instances of national antagonism

existing between the various national groups, all of whom came here to escape from Nazi oppression. And the same principle is, of course, seen in operation on the Continent where restrictions are imposed upon the entry of one unit of occupation into the zone of another.

But have not the Allies fought this war together? Can such an attitude be interpreted as freedom? I fear we can harbour but little hope of the establishment of international harmony and co-operation.

TO THE HEROES  
of the darkest days of Humanity,  
Dedicated in Memorium  
to the Physician  
DR. ERIK MUNCK  
of Brünn.

If we wish to answer the question 'Who are the real heroes of this war', the answer is given in the following letters.

*(The writer of this letter is the brother of a Czech in this country.)*

Luze, June 11, 1945.

Dear Pepik,

This day I shall always remember as the first happy day after so many years of anxiety, oppression, sadness and disappointments, for this morning I have at last received a sign of life from you, in a communication addressed to Luze to our father, in which you announce that you are alive and would like to help. . . . You want news of everything and of everybody and I will try to write you a coherent letter. But to say all I should have to speak very long, too long, and there would be no end of it. It is heartbreaking that everything is so sad. . . .

First of all I will make a sad balance sheet and then I will describe to you briefly our life since the time that we last saw each other.

Our parents are dead. Father died in Oswiecim (Auschwitz, Birkenau) in December, 1943; mother died on January 9th, 1944, at the same place, and our sister Ella died in February, 1944, while in a transport from Terezín. I myself was present at the loading of the transport and she was in the same truck as Verka Polackva from Sezimic. Later I searched as much as I could in order to discover something of the fate of our unhappy sister, and I learnt that this transport of January, 1943, from Terezín went to Oswiecim and that out of 10,000 Jews, only a pitiable 260 survived. But the majority of these also died later,—a so-called natural death, in this horrible concentration camp. All the rest perished in gas chambers, after which they were burnt in ditches and crematoria, and hundreds of thousands before and hundreds of thousands after them. Therefore there is no hope that our Ella can still be alive . . .

The letter enumerates many relatives and acquaintances, and the writer states that it is nearly certain that nobody of his large family is now living. He proceeds to mention the death in 1945 of an uncle in Luze. He states that all the people of the town followed his funeral, and the writer says that this was the last human burial he has seen.

In our factory we all worked until April, 1940, when a German commissar came and everybody was dismissed except myself. And so we were guaranteed a minimal subsistence. But in May, 1941, I was sacked as well and then the Jewish star rose. Special shopping hours were introduced for Jews, and so on, and so on. All that time, especially later in Terezín, we spoke continually about you, and Mother firmly believed that she would see you soon. Father showed everybody your picture and that of your wife, and our parents and her own met rather often.

Then we were taken to Terezín. We were allowed to take with us only 50 kg., and we had to sign various papers stating that we were giving up all our money and property. From Pardubice two transports took us to Terezín. At that place married persons lived in the same block, although of course in a different section. Father did not do any work, he was some sort of controller at the centre of bread distribution, and Mother looked after the lavatories. They got very thin, but apart from fever and other unpleasant conditions, they were not very ill. I don't mention the lice; they were inevitable as all these old people were lying practically on top of each other. Then came the transportation to Poland. Both our aunts perished in the gas chambers.

I want to add a few words about Hanka Pik and her mother. These two women were imprisoned in September, 1942 (at that time some members of families that had gone to England were put into prison), and they were taken to an international camp in Svatoborice. This became one of the worst concentration camps, and we were aghast when we saw these two women later after they had been taken to the quarantine station in Pardubice. But later they also were gassed.

I could continue with accounts like these for hours. I don't want to write of our sister. Everybody was starving in Terezín. Eva Koudel from Myto cared for our parents in such a wonderful way that I can say that even I and my wife, if she is still alive, owe our lives to her. I worked in the Terezín transport department. As we sometimes went out of the Ghetto we were able to take with us some cigarettes which were sold at fantastic prices; but in that way I could earn some more money and supply the family with bread, sugar, margarine, etc., and Father was able to smoke. Then came September when a transport of 5,000 people was taken to a new Ghetto and unfortunately our parents were also taken. Father was 71. I did my best but could not prevent it. I realised what it meant, but foolishly hoped the war would end soon and that we should all meet again. I was with them in that terrible

cattle truck in which sixty persons were crammed together with the luggage. I was able to give our parents all their luggage and we had even sewn some money in Father's waistcoat. But all that was in vain, as I later saw myself, in Birkenau. After we arrived there they were stripped naked, receiving only a few rags, and the tortures to which they were subjected cannot be described. There followed one transport after another. Mother died in Birkenau on January 9th (B II, Block 13, Koje 1). Five thousand persons were in that transport and by March 7th, 1944, only 2,800 had survived. But they were also loaded on to cars and disappeared for ever. Later we learnt that they had all been gassed. Of these gas chambers near which I lived,—that terrible smoke during the day, that frightening glare from the crematorium and the ditches at night,—of that smell of roasted flesh, bones and hair,—I will tell you some day. Even then it won't be easy, but I cannot write about it.

Now a few words about my own life. After I had been dismissed from our firm I joined a Jewish working column near Pardubice where we built a power plant on the Elbe. I worked there one and a quarter year and once a week I was allowed to visit my wife.

The writer next writes of a man who had been sent to Slovakia by the Gestapo and who had been shot during the Slovak rising. He says:

Later I worked in a pit in Moravská Ostrava. I used to go home without permission and was able to spend a few hours with my wife, returning to work during the night. It was only by chance that I escaped the January transports. My wife had a bad attack of angina with a temperature of 40 degrees, but luckily she was taken out of the transport. You may ask me why I did not voluntarily go with our parents, when there was no hope of saving them. Believe me, I acted as I did because of my wife. I could not leave her to her fate and later it was proved that in any case it would have been in vain. Men and women had to live separately in Birkenau, children remained with their mothers, but nearly all of them were finally gassed.

In May, 1944, I was put into a transport. Before three months had passed I was in prison (an unexpected controller at night had found cigarettes on me). Is it not strange to be in prison in a concentration camp? After that I went to Poland. We arrived at Birkenau-Osvencim after a 48 hours' journey in sealed cattle trucks. Next we were robbed of everything, driven behind barbed wire charged with electricity into terrible crowded quarters. My first impressions of this are horrible. My bunk was the same one on which Mother died. People of my acquaintance that I met there looked horrible. We thought that our days had ended, but then some time later a thousand persons were selected, I among them. We were washed, shaved on the whole body, put into drills (striped prison rags) and sent to Schwarzheide to build shelters and clear away debris. The work was horrible. We were under

perpetual bombardment, for the place was a huge factory for making synthetic petrol from brown coal, and we were not allowed to take shelter during raids. Survival was a mere chance. Once I too was wounded. My arm was broken, I had concussion of the brain and my ear-drums were pierced. But nevertheless a fortnight later I had to work again. I don't want to speak of the tortures inflicted by the S.S. I became ill with dysentery and this was followed by a bad phlegmon of the knee. I was operated, and there was not much hope as I weighed only 45 kg. But nevertheless I survived out of a thousand persons,— I and 220 others. In April, 1945, we were suddenly evacuated and started on a terrible journey of hunger and suffering. The S.S. men were confused: from one side the Anglo-Americans were approaching, from the other side the Russians, and so we were chased from one place to another. We came to Česká Lípa in open trucks, and there we had to stand for 48 hours in rain and without any food, tortured by our nervous masters. In Litomerice they unloaded us and took us to Terezín. By that time Terezín was already in the hands of the International Red Cross, and so it happened that very near Terezín the Russians overtook us, shot the terrible S.S. men, and so suddenly we were free.

In Terezín they deloused us, gave us food and then brought us quickly home.

The wife of the writer was later found in the Belsen concentration camp suffering from typhoid. His latest telegram says that she is on her way home to rejoin her husband after months of suffering.

Prague, July 5, 1945.

My dear Grete!

At last I can write to you. You can't imagine how I have been looking forward to this moment. I thank you for your telegrams and hope that you have got my address. I would like to tell you so many things but I don't know where to start. It is 6 years since we have seen each other, and what has happened in all these 6 years and what terrible experiences I have had! If I wrote it all to you it would make a big book. But I hope I shall have a chance of seeing you and telling you all personally.

From September 8th, 1942, I was in Terezín (Teresienstadt). It was not too bad there, although in Terezín I was hungry and very ill. I had an operation for volvulus, pneumonia, encephalitis, and phlegmon, but still I survived. In Terezín we were all together: Ossy and Ella, Rudi and Stella, and now you will be surprised to learn that I married Dr. Presburger in Terezín. It was a so-called Ghetto marriage, which is not valid here. He was a very good friend to me in those difficult times, and I always said to myself that he was loving you in my person. Actually I married him because he protected me from being sent to Poland. He was one of the Ghetto police and these people, as well as

their families, were protected from going to Poland. It was thanks to him that I was able to stay another year in Terezin, otherwise I should not have survived.

In October, 1944, we had all to go away, and Ossy and Hans left one week before me. The Germans told us that we were going to a good camp in Germany and that we should be together. It was not true, we went to Oswiecim (Auschwitz) and what that means you will probably know. For three days and three nights we were 70 persons and all the luggage shut up in a sealed truck. We had only bread and margarine,—not even water did they give us, and for lavatories we used buckets, which remained in the trucks, so you can imagine the atmosphere in which we were,—men, women and children all together. But even that was not anything yet!

In Oswiecim they separated the men from the women. And now came the moment when God again protected us. On one side went the women up to 40, and the older ones on the other side. By chance I was not asked to give my age. I should have told the truth, for I did not know what it meant. All those who went on the other side, including mothers with children up to 14 (including Paula Wermuth and her boy), went to the gas chambers. But that we learnt only a few days later. Then they took us, more than a thousand women, into the barracks and said we were to have a bath. We were glad of that as we had not washed for 3 days. We had to undress in the presence of about 30 S.S. men. They took everything away from us, leaving us standing naked. They also took away our watches and wedding rings, and shaved us all over with a machine. Then they poured lysol on our heads, so that we could not see for several days; and next they gave us rags full of lice, and wooden shoes. After that they drove us into the barracks where we lay always 10 women crowded on a pallet, without a blanket. We warmed ourselves by keeping close together. And so we remained for three weeks. Our food was as follows: at noon a thick soup, always served in one dish for 6 persons, without any spoon; and in the evening 4 ounces of bread. We all went together to the lavatories, under guard, and only when they ordered us, never when we had to. Diarrhoea was terrible there, but we were not permitted to go to the lavatory; so we had to lie on it, and for that they beat us up with sticks. We did not have to work, but every day we had to stand to attention for 3 hours in every kind of weather, and if we said one word we had to kneel for one hour in the mud. Grete, I can't describe this bestiality, this sadism that was thought out to torture us. I never knew that human beings could turn into such beasts as the Germans.

But let me continue. We never saw our men, and we did not know what they were doing. After 3 weeks they took us over the frontier into Germany to work. We hoped that would be the end of our suffering. But alas, it had only started. We went to Birnbäumli, near Breslau. We lived in a forest, without stoves, and we had only one thin blanket between us. We worked 12 hours a day, with a shovel in ditches. We

were never allowed to sit down; we were clothed in rags, with wooden shoes and no stockings in 25 to 30 degrees of frost (Cent.). Isn't it a miracle that I have survived. There we had bitter coffee at 6 o'clock in the morning; at 2 o'clock a wagon came with soup, we got two ladles each. We had to eat standing, and in the evening when we crept back to our places on all fours we received 4 ounces of bread. At Christmas they did not even give us that bread. Grete, you don't know how hunger can hurt. I had hallucinations at night, and all the time I was dreaming of food. Never have I had such a fine figure as then, but how I had to pay for it!

On the 27th of December the guard gave me such heavy blows on my head during work (I did not fill the shovels full, as I was exhausted) that the girls had to take me away unconscious, and as a result I lay very ill for four weeks, with shattered nerves. But that turned out to be my good luck. On the 25th of January the Russians were approaching and we heard the thunder of guns by day and night. We were unbelievably happy and the Germans were nervous and liquidated the camp. That meant that they went with about 800 women who were not ill to another camp further inland. I stayed with 65 other sick women. We were supposed to be shot by the 3 remaining S.S. men, but the next day the Russians arrived, liberated us and those 3 S.S. men ran away. Grete, it was high time for me. Another fortnight and I should have been finished. My weight was not even 43 kilos. After that I was in a Russian hospital for 4 weeks and was so weak that I could not stand on my feet. The Russian officers were wonderful; they gave us a lot of food and I was able after three months to walk again and to throw away my lice-infected rags. And then I received underwear and dresses. But even that was not yet the end of all. Next came strenuous days. We went on, but there were only 25 women left now, the others had died. We had frozen feet, so that the flesh fell off while we were returning across Poland to Slovakia. We went in trucks, for there were no other wagons. It was 14 days and 14 nights to Lublin where we stayed a week and waited for Red Cross transportation to Slovakia. But now there were left only 8 women out of the original 1000, two from Vienna and 6 from Prague. We went to Kosice, again a journey of 14 days and 14 nights. I remained in Kosice 5 weeks, waiting for the liberation of Prague, where we arrived on the 18th of May. In Kosice I had a fine life. People did a lot for us, particularly the Repatriation Office. Grete, people tell me that I look well; I have put on 15 kilo., and I am surprised that after all I have been through I have no grey hair and no wrinkles.

But this is not the main thing. I have survived. That is all very strange and I can't well understand it. My nerves are still upset but I hope this will all be alright soon.

A week ago Bubik arrived in Prague. You can't imagine how I was longing for that boy, for I never thought I should see him so soon. He didn't know that I had been in the concentration camp. Bubik is very

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kind to me, but unfortunately he could stay only 6 days, because he is with the army in Pilsen.

Our parents died half a year before I went to Terezín. Mother suffered terribly, but father had a stroke and so his death was easy. Brother Rudi returned with me from Osiezin. He is completely worn and ruined in spirit, but chiefly because his wife is still missing, and you know how they loved each other. He misses his beloved Stella so much.

My darling sister, I have written you all this, so that you can form a picture of what we have been through since we last saw each other. Forgive me for writing at such length, and if you don't want to read it, don't do so. But it has been such a relief to me to get it off my mind.

Yesterday Margaret Wallerstein returned to Prague in an airplane with other repatriates. She told us that she had been so anxious to be one of the very first to meet her people after 6 years. But she turned to stone when she realised that not one person of her whole family had survived!

The repatriation office is looking after me, and we have also received some money and dresses.

Forgive me for this strange muddle, but my head is not quite right yet, although the doctors say it will soon be better. My dearest girl, I am so happy that I am permitted to live again, and I still can't believe it, especially when I wake up I cannot understand my present life, and I am surprised that I am in bed and not on the floor.

These letters are documents. They show the spirit which has helped them to survive, despite all the horrors which they had to undergo. It is not the fighting man, it is not the pilot of the Air Force, it is this people who have suffered beyond words and who have waited for the moment of their liberation. And here I want to say a few words about the heroism of a simple doctor. It concerns Dr. Munck, the radiologist of Brünn. When Hitler invaded Czechoslovakia he could have gone to India to save his life and to assume the position of an X-ray specialist. But he refused, with the simple words, 'As long as a Jew has to stay in my country, so long will I, as a doctor, have to look after him'. Then came Theresienstadt. This place became the Jewish Ghetto of Czechoslovakia, where later all the Czech and Polish Jews had to settle. They had their own money, and they lived together in a community until the Germans were defeated in Russia. Afterwards most of the inhabitants of Theresienstadt were sent to the gas chambers or other concentration camps. Dr. Munck went with the Jews to Theresienstadt and built up a hospital which can be regarded as one of the best hospitals on the Continent. He



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worked day and night. People escaped from Theresienstadt tell of the miracles that he performed: how he dealt with the most difficult diseases, and how he even attempted to go from one concentration camp to another wherever his help was needed. Regardless of the greatest danger, regardless of his own safety, he was really the help and saviour of the whole Jewish community.

Then approached the day of Allied Victory. It can be imagined how alarmed these people were when they heard the signs of their liberation, when they saw the Russians and the Americans approaching. Light seemed to be streaming into the darkness. At that moment three S.S. men entered Dr. Munck's room,—who was sitting at his desk,—and shot three bullets at his head. That was his end, and I think this man deserves an everlasting memorial, as an act of gratitude and homage from all physicians. He himself erected a monument in honour of what Medicine stands for. May his deeds and glorious efforts cast their beam of light and inspire his followers to establish a super-national brotherhood, and may his memory illumine Medicine along the road of the pioneer toward such a brotherhood. Dr. Erik Munck, your example will live in the History of the Jews!











